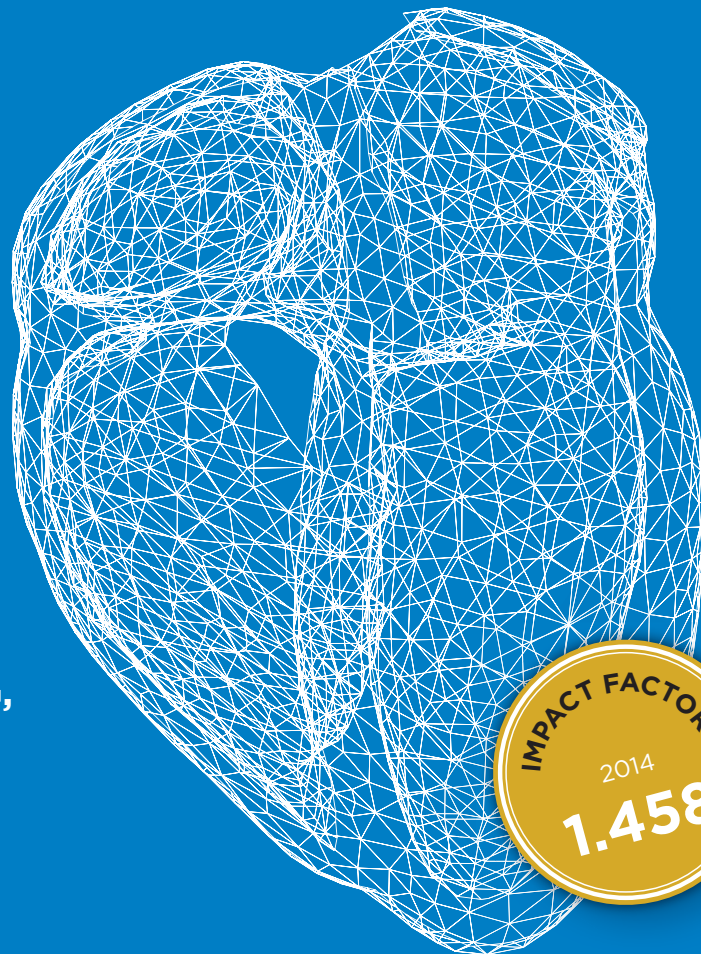


# BIOMEDICAL ENGINEERING BIOMEDIZINISCHE TECHNIK

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ABSTRACTS BMT 2015  
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## Abstracts BMT 2015, 49. DGBMT Jahrestagung, Lübeck

\*Contributions marked with an asterisk in front of the title are being published in the new open access journal *Current Directions in Biomedical Engineering* (s. content at <http://www.degruyter.com/view/j/cdbme>).

Title	Authors with affiliation and country	Session code	Session	Abstract Nr	Session start time
<i>In-vitro analysis of the antimicrobial properties of magnesium-coated titanium implants</i>	Sarah Zaatreh (University Medicine Rostock, Germany); David Haffner (CAU Kiel, Germany); Juliane Pasold, Bernd Kreikemeyer, Wolfram Mittelmeier and Andreas Podbielski (University Medicine Rostock, Germany); Eckhard Quandt (CAU Kiel, Germany); Rainer Bader (University Medicine Rostock, Germany)	Track A	Biomaterials and Biocompatibility 1	A_01	16.09.2015 13:45
<i>Engineering of PLGA/PEG nanoparticles as a versatile platform for drug delivery</i>	Alexandros Repanas (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Varvara Karagkiozaki (Aristotle University of Thessaloniki, Greece); Dimitrios Fatouros (School of Pharmacy, Aristotle University of Thessaloniki, Greece); Stergios Logothetidis (Aristotle University of Thessaloniki, Greece); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track A	Biomaterials and Biocompatibility 1	A_02	16.09.2015 13:45
<i>Using an in vitro perfusion culture system to estimate the drug release behaviour of drug-eluting stents close to physiological conditions</i>	Andreas Rudolph (Rostock University Medical Center, Germany); Niels Grabow and Klaus-Peter Schmitz (Universität Rostock, Germany); Marina Hovakimyan and Thomas Eickner (Rostock University Medical Center, Germany)	Track A	Biomaterials and Biocompatibility 1	A_03	16.09.2015 13:45
<i>Calcification detection of in-vitro calcified pericard patches with Fetuin-A</i>	Svenja van Geul, Anne Babler and Ulrich Steinseifer (RWTH Aachen, Germany)	Track A	Biomaterials and Biocompatibility 1	A_04	16.09.2015 13:45
<i>* Development and Characertization of Superparamagnetic Coatings for new Applications in MPI</i>	Kerstin Lüdtke-Buzug and Inga Kuschnerus (Universität zu Lübeck, Germany)	Track A	Biomaterials and Biocompatibility 1	A_05	16.09.2015 13:45

<i>Cell adhesive finishing of implant surfaces by plasma polymerized allylamine - PPAAm</i>	Birgit Finke (Leibniz-Institute for Plasma Science and Technology Greifswald, Germany); Henrike Rebl, Barbara Nebe, Carmen Zietz and Rainer Bader (Rostock University Medical Center, Germany); Uwe Walschus and Michael Schlosser (University Greifswald, Germany); Klaus-Dieter Weltmann and Martin Polak (Leibniz-Institute for Plasma Science and Technology Greifswald, Germany)	Track A	Biomaterials and Biocompatibility 2	A_06	16.09.2015 16:30
<i>Effect of different solvents on morphology and properties of piezoelectric PVDF scaffolds for nerve regeneration</i>	Fedaa AL Halabi (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Lena Freund (Institute of Neuroanatomy, Hannover Medical School, Germany); Alexandros Repanas, Peter Behrens and Sara Knigge (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Kirsten Haastert-Talini (Hannover Medical School, Germany); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track A	Biomaterials and Biocompatibility 2	A_07	16.09.2015 16:30
<i>Electrophoretic deposition of ligand-free nanoparticles affects electrode impedance</i>	Svilen Angelov (Medizinische Hochschule Hannover, Germany); Sven Koenen and Jurij Jakobi (Universität Duisburg-Essen, Germany); Hans E. Heissler (Medizinische Hochschule Hannover, Germany); Mesbah Alam (Medical University of Hannover, Germany); Kerstin Schwabe (Medizinische Hochschule Hannover, Germany); Stephan Barcikowski (University of Duisburg-Essen, Germany); Joachim Krauss (Medizinische Hochschule Hannover, Germany)	Track A	Biomaterials and Biocompatibility 2	A_08	16.09.2015 16:30
<i>Degradation of implant surfaces described by roughness and spatial frequency analysis</i>	Olaf Specht (Universität Rostock, Germany); Nina Hennicke and Jan Konasch (University of Rostock, Germany); Wolfram Schmidt, Klaus-Peter Schmitz and Niels Grabow (Universität Rostock, Germany)	Track A	Biomaterials and Biocompatibility 2	A_09	16.09.2015 16:30
<i>Carbon Nanotube Coatings for Neural Interface Electrodes</i>	Niklas Burbliès (Leibniz Universität Hannover, Germany); Jennifer Schulze (Hanover Medical School, Germany); Hans-Christoph Schwarz and Kim Dana Kreisköther (Leibniz Universität Hannover, Germany); Katharina Kranz (Hanover Medical School, Germany); Kirsten Wissel (Medizinische Hochschule Hannover, Germany); Athanasia Warnecke (Hanover Medical School, Germany); Peter Behrens (Leibniz Universität Hannover, Germany)	Track A	Biomaterials and Biocompatibility 2	A_10	16.09.2015 16:30

<i>Covalent linkage of Bone morphogenetic protein (rhBMP-2) on self-assembled monolayers does not preclude leakage of a soluble species</i>	Herbert Jennissen (Universität Duisbur-Essen, Germany); Julia Holtkamp (Universität Duisburg-Essen, Germany)	Track A	Biomaterials and Biocompatibility 2	A_11	16.09.2015 16:30
<i>Isolation and Characterization of Oat Spelt Arabinoxylan</i>	Ann-Katrin Lehmann (Fachhochschule Luebeck, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_12	17.09.2015 14:30
<i>Wear simulator study of total knee replacement with different load scenarios derived from telemetric in vivo data</i>	Rebecca Dammer (University Medicine Rostock, Germany); Carmen Zietz, Henry Dempwolf and Mario Jackszis (University of Rostock, Germany); Enrico Mick (Department of Orthopaedics, University Medicine Rostock, Germany); Rainer Bader (Universität Rostock, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_13	17.09.2015 14:30
<i>Structural and biochemical characterization of the exopolysaccharide of Staphylococcus epidermidis 1457</i>	Christian Grünewald (University of Applied Science Lübeck, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_14	17.09.2015 14:30
<i>Additive Manufacturing of magnesium-based biodegradable implants</i>	Matthias Gieseke (Laser Zentrum Hannover e. V., Germany); Julia Matena (TiHo Hannover, Germany); Andreas Kampmann (Medizinische Hochschule Hannover, Germany); Michael Grau and Laura Roland (TiHo Hannover, Germany); Andreas Grunewald, Christian Nölke and Stefan Kaieler (Laser Zentrum Hannover e. V., Germany); Hans Jürgen Maier (Leibniz Universität Hannover, Germany); Hugo Murua Escobar (Universität Rostock, Germany); Ingo Nolte (Tierärztliche Hochschule Hannover, Germany); Nils-Claudius Gellrich (Medizinische Hochschule Hannover, Germany); Heinz Haferkamp (Leibniz Universität Hannover & Laser Zentrum Hannover e. V., Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_15	17.09.2015 14:30
<i>Investigations on fracture behaviour of dental restoratives and tooth material under impact load</i>	Mareike Warkentin, Janine Stark, Olaf Specht, Valerie-Sophie Polster, Detlef Behrend and Heinrich von Schwanewede (Universität Rostock, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_16	17.09.2015 14:30

<i>Fabrication of electrospun microfibers for cardiovascular tissue engineering</i>	Alexandros Repanas (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Dimosthenis Mavrilas (University of Patras, Germany); Willem Wolkers, Marc Müller and Birgit Glasmacher (Institute for Multiphase Processes, Leibniz University Hannover, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_17	17.09.2015 14:30
<i>Coaxial electrospinning as a technology to fabricate scaffolds for sustained delivery of hydrophilic drugs</i>	Alexandros Repanas, Fedaa AL Halabi, Marc Müller and Birgit Glasmacher (Institute for Multiphase Processes, Leibniz University Hannover, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_18	17.09.2015 14:30
<i>The differentiation of human monocytes into osteoclasts is upregulated after phagocytosis of metallic and ceramic wear particles</i>	Jana Markhoff and Juliane Pasold (University Medicine Rostock, Germany); Jenny Tillmann (University of Rostock, Germany); Rainer Bader (University Medicine Rostock, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_19	17.09.2015 14:30
<i>Comparison of MgF2-coated and uncoated MgNd2 alloys in contact with nasal mucosal tissue - in vivo approach</i>	Martin Durisin (Medical University of Hannover, Germany); Constantin Weber (Medical University Hannover, Germany); Janin Reifenrath (University of Veterinary Medicine Hannover, Germany); Jan-Marten Seitz (Leibniz University of Hannover, Germany); Rainer Eifler (Leibniz University Hannover, Germany); Hans Jürgen Maier (Leibniz Universität Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_20	17.09.2015 14:30
<i>Low-Temperature Extrusion of Equal Channel Angular Pressed Ti6Al4V</i>	Maciej Krystian (AIT Austrian Institute of Technology GmbH, Austria); Kai Ullenbaum (Märkisches Werk GmbH, Germany); Bernhard Mingler and Manfred Bammer (AIT Austrian Institute of Technology GmbH, Austria)	Track A	Poster Session: Biomaterials and Biocompatibility	A_21	17.09.2015 14:30
<i>Improved lubricity of biomedical implants with a biocompatible hyaluronic acid-based coating: in vitro investigation of coating parameters, morphology and friction forces</i>	Sebastian Kaule (Universität Rostock, Germany); Sebastian Helm (University of Rostock, Germany); Svea Petersen, Klaus-Peter Schmitz and Niels Grabow (Universität Rostock, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_22	17.09.2015 14:30
<i>The influence of mechanical stress on drug release from PLLA/PDLLA implant coatings</i>	Daniela Arbeiter (Universität Rostock, Germany); Thomas Eickner (University of Rostock, Germany); Thomas Reske, Monique Tzschoppe and Niels Grabow (Universität Rostock, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_23	17.09.2015 14:30

<i>Multifunctional Hydroxyapatite-Composites for Biomedical Applications</i>	Nina Ehlert and Richard Hinterding (Leibniz Universität Hannover, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_24	17.09.2015 14:30
<i>Elastic textile structures for novel vascular prostheses</i>	Klas-Moritz Kossel and Tim Bolle (Institut für Textiltechnik der RWTH Aachen University, Germany); Florian Eggert and Thomas Gries (RWTH Aachen University, Germany); Stefan Jockenhoevel (RWTH Aachen & Helmholtz Institute for Biomedical Engineering, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_25	17.09.2015 14:30
<i>Synthesis of Superparamagnetic Iron Oxide Nanoparticles under Ultrasound Control</i>	Christina Debbeler and Kerstin Lüdtkke-Buzug (Universität zu Lübeck, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_26	17.09.2015 14:30
<i>In-vitro Stability of Hybrid Deep Brain Stimulation (DBS) Probe</i>	Danesh Ashouri Vajari (University of Freiburg, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_27	17.09.2015 14:30
<i>* The development of an experimental setup to measure acousto-electric interaction signal</i>	Kristin Inga Gunnlaugsdottir (Reykjavik University, Iceland)	Track A	Poster Session: Biomaterials and Biocompatibility	A_28	17.09.2015 14:30
<i>* Stability Analysis of Ferrofluids</i>	Kerstin Lüdtkke-Buzug and Katharina Duda (Universität zu Lübeck, Germany)	Track A	Poster Session: Biomaterials and Biocompatibility	A_29	17.09.2015 14:30
<i>Holoscopy: combining OCT with digital holography</i>	Gereon Hüttmann (Universität zu Lübeck, Germany); Hendrik Spahr, Helge Sudkamp and Gesa Franke (University of Lübeck, Germany); Dierck Hillmann (Thorlabs GmbH, Germany)	Track B	FS: Computational optical coherence tomography and digital holography	B_01	16.09.2015 13:45
<i>Retinal MHz-OCT with FDML-Lasers</i>	Jan Philip Kolb (Universität zu Lübeck, Germany); Thomas Klein, Corinna L. Kufner and Wolfgang Wieser (University of Munich, Germany); Robert Huber (University of Luebeck, Germany)	Track B	FS: Computational optical coherence tomography and digital holography	B_02	16.09.2015 13:45
<i>Investigating the electrical activity of cardiac tissue with complex ablation lesions using fluorescence-optical and electrical techniques</i>	Stefan Pollnow, Gunnar Seemann and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track B	Poster Session: Biophotonics	B_03	17.09.2015 14:30

<i>IR and UV Vortex-beams for ultraprecise plasma-mediated eye surgery</i>	Sebastian Freidank, Norbert Linz and Alfred Vogel (Universität zu Lübeck, Germany)	Track B	Poster Session: Biophotonics	B_04	17.09.2015 14:30
<i>* Energy Harvesting for Active Implants: Powering a Ruminal pH-Monitoring System</i>	Rene Machts (TU Ilmenau, Germany); Thomas Reuter (fzmb GmbH - Forschungszentrum für Medizintechnik und Biotechnologie, Germany); Petra Prokop and Olga Schewtschenko (fzmb GmbH, Germany); Mike Stubenrauch and Cornelius Schilling (Ilmenau University of Technology, Germany); Hartmut Witte (Technische Universität Ilmenau & Fachgebiet Biomechatronik, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_01	17.09.2015 09:15
<i>High sensitive and fast magnetic characterization of magnetic nanoparticles in liquid flow</i>	Norbert Löwa (Physikalisch Technische Bundesanstalt, Germany); Frank Wiekhorst and Lutz Trahms (Physikalisch-Technische Bundesanstalt, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_02	17.09.2015 09:15
<i>* New type of fluxgate magnetometer for the heart's magnetic fields detection</i>	Ruslan Rybalko (Fraunhofer-Institute for Integrated Circuits, Germany); Jens Haueisen (Technical University Ilmenau, Germany); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_03	17.09.2015 09:15
<i>* Field mapping of ballistic pressure pulse sources</i>	Abtin Jamshidi Rad (University of Applied Sciences, Germany); Friedrich K.W. Ueberle (University of Applied Sciences, Hamburg, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_04	17.09.2015 09:15
<i>* Development of a new homecare sleep monitor using body sounds and motion tracking</i>	Christoph Kalkbrenner and Manuel Eichenlaub (University of Applied Sciences Ulm, Germany); Rainer Brucher (Hochschule Ulm, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_05	17.09.2015 09:15
<i>* Noise properties of textile, capacitive EEG electrodes</i>	Sara Nazari Asl (Technische Universität Braunschweig, Germany); Frank Ludwig and Meinhard Schilling (TU Braunschweig, Germany)	Track C	Nano- and Physikalisch-chemische Systeme	C_06	17.09.2015 09:15
<i>Rapid-prototyped Microswimmers for Navigation in Bodily Fluids</i>	Tian Qiu (Max Planck Institute for Intelligent Systems & Institute of Bioengineering, EPFL, Germany); Stefano Palagi (Max Planck Institute for Intelligent Systems, Germany); Debora Walker and Peer Fischer (Max Planck Institute for Intelligent Systems & Universität Stuttgart, Germany)	Track C	Poster Session: Biosensors and Bioanalytics	C_07	17.09.2015 14:30
<i>Microfluidic multiplexed electrochemical biosensor platform</i>	Andre Kling, Can Dincer, Lucas Armbrrecht, Josef Horak, Jochen Kieninger and Gerald Urban (University of Freiburg, Germany)	Track C	Chemo-Biosensor	C_08	17.09.2015 16:30

<i>Point of care detection of infectious diseases using an electrical biochip cartridge</i>	Lars Blohm and Eric Nebling (Fraunhofer Institute for Silicon Technology, ISIT, Germany)	Track C	Chemo-Biosensor	C_09	17.09.2015 16:30
<i>Smelling bladder cancer via an electronic nose: First results of a pilot stud</i>	Andreas Voss and Claudia Fischer (University of Applied Sciences Jena, Germany); Daniel Steinbach, Marcus Horstmann and Marc-Oliver Grimm (University Hospital of Jena, Germany)	Track C	Chemo-Biosensor	no abstract available	17.09.2015 16:30
<i>* Investigation of endothelial growth using a sensors-integrated microfluidic system to simulate physiological barriers</i>	Taleieh Rajabi and Ralf Ahrens (Karlsruhe Institute of Technology, Germany); Volker Huck and Martin März (Heidelberg University & Medical Faculty Mannheim, Germany); Hanna Gantenbein (Karlsruhe Institute of Technology, Germany); Stefan W. Schneider and Horst Schroten (Heidelberg University & Medical Faculty Mannheim, Germany); Andreas Guber (KIT - Karlsruher Institut für Technologie, Germany)	Track C	Chemo-Biosensor	C_11	17.09.2015 16:30
<i>Surface Treatments that allow for the Controlled Propulsion of Microstructures in Biological Fluids and Tissues</i>	Debora Walker (Max Planck Institute for Intelligent Systems & Universität Stuttgart, Germany); Tian Qiu (Max Planck Institute for Intelligent Systems & Institute of Bioengineering, EPFL, Germany); Stefano Palagi (Max Planck Institute for Intelligent Systems, Germany); Peer Fischer (Max Planck Institute for Intelligent Systems & Universität Stuttgart, Germany)	Track C	Chemo-Biosensor	C_12	17.09.2015 16:30
<i>Body Core Temperature assessment during sleep using a double-sensor technique</i>	Klaus Junghanns (Universität zu Lübeck, Germany); Jochim Koch (Drägerwerk AG & Co. KGaA, Germany); Andreas Sprenger (University of Luebeck, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	D_01	16.09.2015 11:15
<i>Sleep, Memory, and Weak Electric Stimulation</i>	Lisa Marshall, Sonja Binder, Ping Koo, Diana Campos-Beltran, Arne Weigenand and Thomas Martinetz (University of Luebeck, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	D_02	16.09.2015 11:15
<i>Brain stimulation during sleep: Targeting EEG oscillations to investigate the memory function of sleep</i>	Matthias Mölle (Center of Brain, Behavior and Metabolism, University of Luebeck, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	no abstract available	16.09.2015 11:15



<i>Transcranial direct current stimulation during sleep in patients with psychiatric disorders</i>	Robert Göder (University Hospital Schleswig-Holstein, Germany); Sarah Ahlich and Anna Nietzschmann (University Hospital SH, Germany); Manuel Munz (University Hospital, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	no abstract available	16.09.2015 11:15
<i>Neurofeedback training in Clinical Application</i>	Maren Schütze (University of Lübeck & Zentrum für Integrative Psychiatrie, Germany); Klaus Junghanns (Universität zu Lübeck, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	D_05	16.09.2015 11:15
<i>Deep Brain Stimulation in Obsessive-Compulsive Disorder: Effects and Mechanisms</i>	Bartosz Zurowski (University of Luebeck, Germany); Christian Moll and Andreas Engel (Institute for Neurophysiology and Pathophysiology, Germany); Volker Tronnier (University Hospital Schleswig-Holstein (UKSH), Campus Luebeck, Germany); Till Schneider (Institute for Neurophysiology and Pathophysiology, Germany)	Track D	FS: New developments in the analysis and modification of central nervous rhythms	no abstract available	16.09.2015 11:15
<i>Frequency-selective analysis of spatially high-resolved neural information transfer</i>	Britta Pester (Jena University Hospital, Germany); Lutz Leistritz (Jena University Hospital & Friedrich Schiller University Jena, Germany); Herbert Witte (Friedrich Schiller University of Jena, Germany)	Track D	Biosignal Processing 1	D_07	16.09.2015 16:30
<i>Seizure prediction in epilepsy: Level crossing analysis</i>	Vanessa Senger (Technical University of Dresden, Germany); Ronald Tetzlaff (Technische Universität Dresden, Germany)	Track D	Biosignal Processing 1	D_08	16.09.2015 16:30
<i>* Detecting phase singularities and rotor center trajectories based on the Hilbert transform of intraatrial electrograms in an atrial voxel model</i>	Laura Anna Unger (Karlsruhe Institute of Technology, Germany); Markus Rottmann (Karlsruher Institut für Technologie (KIT), Germany); Gunnar Seemann and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track D	Biosignal Processing 1	D_09	16.09.2015 16:30
<i>* Spike Sorting: The overlapping spikes challenge</i>	Inga Sauer (Technische Hochschule Mittelhessen (THM), Germany); Christopher Doerr (Technische Hochschule Mittelhessen THM, Germany); Thomas Schanze (Technische Hochschule Mittelhessen, Germany)	Track D	Biosignal Processing 1	D_10	16.09.2015 16:30

<i>Improving ECG Reconstruction using Automatic Posture Recognition</i>	Steffen Mann (Technische Universität Berlin, Germany); Julian Dierkes (TU-Berlin, Germany); Reinhold Orglmeister (Technische Universität Berlin, Germany)	Track D	Biosignal Processing 1	D_11	16.09.2015 16:30
<i>* Separating the effect of respiration from the Heart Rate Variability for cases of constant harmonic breathing</i>	Michael Kircher (Karlsruhe Institute of Technology, Germany); Gustavo Lenis and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track D	Biosignal Processing 1	D_12	16.09.2015 16:30
<i>Robust signal processing - the importance from a medical perspective</i>	Michael Imhoff (Ruhr-University Bochum, Germany); Roland Fried (Technical University Dortmund, Germany)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_13	17.09.2015 09:15
<i>Pulse wave analysis in clinical and scientific practice: State of the art and possible future scenario</i>	Niklas Müller (Medical University of Vienna, Austria); Joachim Streis (GfG Gesellschaft für Gerätebau, Germany); Stefan Reuter and Hermann Pavenstädt (Westfälische Wilhelms Universität Münster, Germany); Thomas Felderhoff (Dortmund University of Applied Sciences and Arts, Germany); Veit Busch (Jakob Henle Haus, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_14	17.09.2015 09:15
<i>Detection of a spontaneous pulse by photoplethysmography during experimental automated cardiopulmonary resuscitation</i>	Ralph Wijshoff (Philips Research & Eindhoven University of Technology, The Netherlands); Wouter Peeters (Philips Research, The Netherlands); Gerrit Jan Noordergraaf (St. Elisabeth Hospital, Tilburg, The Netherlands); Massimo Mischi (Eindhoven University of Technology, The Netherlands); Ronald Aarts (Eindhoven University of Technology and Philips Research, The Netherlands)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_15	17.09.2015 09:15
<i>Determination of Arterial Pulse Wave Characteristics: The Limitations of Numerical Differentiation</i>	Michael Wulf (University of Applied Sciences and Arts Dortmund, Germany); Gerhard Staude (University FAF Munich, Germany); Andreas Knopp (Munich University of the Bundeswehr, Germany); Thomas Felderhoff (Dortmund University of Applied Sciences and Arts, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_16	17.09.2015 09:15
<i>Obstructive impact of a cannula on blood flow in the Vena Cava during VV-ECMO application</i>	Markus Bongert and Marius Geller (Fachhochschule Dortmund, Germany); Justus Strauch and Dirk Buchwald (Universitätsklinikum Bergmannsheil Bochum, Germany); Ulf Aschenbrenner (Universitätsklinikum Dresden, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_17	17.09.2015 09:15

<i>Pulse reliability analysis in ambulatory measurement settings</i>	Maik Pflugradt (TU Berlin, Germany); Reinhold Orglmeister (Technische Universität Berlin, Germany)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_18	17.09.2015 09:15
<i>Spatial Analysis of Hemoglobin Concentration with Hyperspectral Imaging Techniques</i>	Jörg Thiem (University of Applied Sciences and Arts Dortmund, Germany); Heiko Schroeder (University of Applied Sciences and Arts, Dortmund, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_19	17.09.2015 09:15
<i>Turning failure into virtue - Motion artifact based classification of motion and posture in magnetic induction measurements</i>	Daniel Teichmann (RWTH Aachen University, Germany); Andreas Kuhn (Euro Engineering AG, Karlsruhe, Germany); Steffen Leonhardt and Marian Walter (RWTH Aachen, Germany)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_20	17.09.2015 09:15
<i>The use of motion analysis technology to evaluate the individual functional benefit in transfemoral prosthetics</i>	Ann-Kathrin Hömme and Burkhard Drerup (Bundesfachschule für Orthopädie Technik, Germany); Bernd Sibbel (Bundesfachschule für Orthopädie Technik, Germany); Stefan Bieringer (Bundesfachschule für Orthopädie Technik, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_21	17.09.2015 09:15
<i>* Metal Artifact Reduction by Projection Replacements and Non-local Prior Image Integration</i>	Maik Stille (University of Luebeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_22	17.09.2015 09:15
<i>Quaternion-based Estimation of a Person's Head Posture and Movement Using Inertial and Magnetic Sensors</i>	Puian Tadayon (University of Applied Sciences and Arts, Dortmund, Germany); Thomas Felderhoff (Dortmund University of Applied Sciences and Arts, Germany); Andreas Knopp (Munich University of the Bundeswehr, Germany); Gerhard Staude (University FAF Munich, Germany)	Track D	FS: Medical and therapeutic needs with adapted signal processing solutions	D_23	17.09.2015 09:15
<i>Patient monitoring on general wards - Needs, challenges and opportunities for monitoring respiration rate</i>	Lars Schmitt (Philips, Germany); Jens Muehlsteff (Philips Research, The Netherlands)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_24	17.09.2015 09:15
<i>Control charts for biosignals based on robust two-sample tests</i>	Sermad Abbas and R. Fried (TU Dortmund University, Germany)	Track D	FS: Signal Artifact Handling in Clinical Applications	D_25	17.09.2015 09:15

<i>* Automated Classification of Stages of Anaesthesia by Populations of Evolutionary optimized Fuzzy Rules</i>	Christian Walther (University of Applied Sciences Schmalkalden & Fraunhofer IOSB, Advanced System Technology, Germany); Andreas Wenzel (Fraunhofer IOSB-AST, Germany); Manuel Schneider and Maria Trommer (University of Applied Sciences Schmalkalden, Germany); Klaus-Peter Sturm (Hospital of Schmalkalden, Germany); Uwe Jaeger (Medical Practice of Steinbach-Hallenberg, Germany)	Track D	Poster Session: Biosignal Processing	D_26	17.09.2015 14:30
<i>* Effects of Sampling Rate on Automated Fatigue Recognition in Surface EMG Signals</i>	Lorenz Kahl and Marcus Eger (Drägerwerk AG & Co. KGaA, Germany); Ulrich Hofmann (Uniklinik Freiburg, Germany)	Track D	Poster Session: Biosignal Processing	D_27	17.09.2015 14:30
<i>Prominent Feature Extraction for Brain Computer Interface</i>	Basant Agarwal (Swami Kesvanand Institute of Technology Jaipur, India)	Track D	Poster Session: Biosignal Processing	D_28	17.09.2015 14:30
<i>Separating goal-oriented from artefactual movement related signals in mobile EEG during soccer penalty shooting</i>	Tino Schmidt and Dietmar Henrich (Brandenburg University of Technology, Germany)	Track D	Poster Session: Biosignal Processing	D_29	17.09.2015 14:30
<i>Scanning Electrical Impedance on the Palm of the Hand</i>	Johannes Port (University of Stuttgart, Germany); Christoph Joppek (Universität Stuttgart, Germany); Joachim H. Nagel (University of Stuttgart, Germany)	Track D	Poster Session: Biosignal Processing	D_30	17.09.2015 14:30
<i>i-VITAL - Assistance System to Motorcyclists for Health Monitoring and Accident Detection</i>	Schmitz Björn (Fraunhofer Institute for Integrated Circuits IIS, Germany); Andreas Tobola (Fraunhofer Institute for Integrated Circuits IIS & Tobola Engineering, Germany); Rafael Maestre (Centre of Furniture and Wood of the Region of Murcia, Spain); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany); Andrés Lorenzo Bleda (Technologic Centre of Furniture and Wood of the Region of Murcia, Spain); Christian Weigand (Fraunhofer IIS, Germany); Andreas Huber (Fraunhofer Institute for Integrated Circuits IIS, Germany); Ruslan Rybalko (Fraunhofer-Institute for Integrated Circuits, Germany)	Track D	Poster Session: Biosignal Processing	D_31	17.09.2015 14:30
<i>* Closed-Loop Transcranial Alternating Current Stimulation of Slow Oscillations</i>	Christian Wilde, Ralf Bruder, Sonja Binder and Lisa Marshall (University of Luebeck, Germany); Achim Schweikard (Universität Lübeck, Germany)	Track D	Poster Session: Biosignal Processing	D_32	17.09.2015 14:30

* <i>Cardiac index in atrio- and interventricular delay optimized cardiac resynchronization therapy and cardiac contractility modulation</i>	Jonas Tumamos (University of Applied Sciences Offenburg, Germany); Matthias Heinke (University of Applied Sciences Offenburg & Department of Electrical Engineering and Information Technology, Germany); Norbert Wulf (Impulse Dynamics GmbH, Germany); Olaf Solbrig and Jürgen Quereggässer (Medis GmbH Ilmenau, Germany); Helmut Kühnert (University of Jena, Germany)	Track D	Poster Session: Biosignal Processing	D_33	17.09.2015 14:30
* <i>The role of expert evaluation for microsleep detection</i>	Martin Golz, Adolf Schenka and David Sommer (University of Applied Sciences Schmalkalden, Germany); Britta Geissler and Axel Muttray (Johannes Gutenberg University of Mainz, Germany)	Track D	Poster Session: Biosignal Processing	D_34	17.09.2015 14:30
* <i>The impact of baseline wander removal techniques on the ST segment in simulated ischemic 12-lead ECGs</i>	Nicolas Pilia (Karlsruhe Institute of Technology (KIT) & Institute of Biomedical Engineering, Germany); Gustavo Lenis (Karlsruhe Institute of Technology (KIT), Germany); Axel Loewe (Karlsruher Institut für Technologie (KIT), Germany); Walther H W Schulze and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track D	Poster Session: Biosignal Processing	D_35	17.09.2015 14:30
* <i>Locating regions of arrhythmogenic substrate by analyzing the duration of triggered atrial activities</i>	Bhawna Verma and Tobias Oesterlein (Karlsruher Institut für Technologie (KIT), Germany); Armin Luik and Claus Schmitt (Städtisches Klinikum Karlsruhe, Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track D	Biosignal Processing 2	D_36	17.09.2015 16:30
<i>Image-based Modeling of Respiratory Motion of Inner Organs</i>	Heinz Handels, Jan Ehrhardt, Matthias Wilms, Dirk Fortmeier and Andre Mastmeyer (University of Lübeck, Germany)	Track D	FS:DGBMT and GMDS/GI Workshop "Biomedical Image and Signal Computing - BISC 2015"	D_37	17.09.2015 16:30
<i>Impaired cardiorespiratory coupling in patients with schizophrenia and their healthy first-degree relatives</i>	Steffen Schulz (University of Applied Sciences Jena, Germany); Jens Haueisen (Technical University Ilmenau, Germany); Karl Jürgen Bär (University Hospital, Jena, Germany); Andreas Voss (University of Applied Sciences Jena, Germany)	Track D	Biosignal Processing 2	D_38	17.09.2015 16:30

<i>Advancement in magnetorelaxometry tomography of magnetic nanoparticles by optimized activation sequences and excitation setups</i>	Daniel Baumgarten and Roland Eichardt (Technische Universität Ilmenau, Germany); Maik Liebl and Uwe Steinhoff (Physikalisch-Technische Bundesanstalt, Germany)	Track D	FS:DGBMT and GMDS/GI Workshop "Biomedical Image and Signal Computing - BISC 2015"	D_39	17.09.2015 16:30
<i>* Combining different ECG derived respiration tracking methods to create an optimal reconstruction of the breathing pattern</i>	Gustavo Lenis (Karlsruhe Institute of Technology (KIT), Germany); Felix Conz (Karlsruhe Institute of Technology, Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track D	Biosignal Processing 2	D_40	17.09.2015 16:30
<i>Analysis of initial subcellular Ca<sup>2+</sup> signals in fluorescence microscopy data from the perspective of image and signal processing</i>	René Werner, Daniel Schetelig and Dennis Säring (University Medical Center Hamburg-Eppendorf, Germany); Sven-Thomas Antoni and Adam Dabrowski (Hamburg University of Technology, Germany); Björn-Philipp Diercks, Ralf Fliegert and Andreas Guse (University Medical Center Hamburg-Eppendorf, Germany); Alexander Schlaefer (Hamburg University of Technology, Germany); Insa Wolf (University Medical Center Hamburg-Eppendorf, Germany)	Track D	FS:DGBMT and GMDS/GI Workshop "Biomedical Image and Signal Computing - BISC 2015"	D_41	17.09.2015 16:30
<i>Echtzeitanalyse von EKG Holter-Signalen</i>	Stephan Jonas (RWTH Aachen University, Germany); Nikolaus Marx (Uniklinik RWTH Aachen, Germany); Thomas M Deserno (née Lehmann) (RWTH Aachen University, Germany)	Track D	FS:DGBMT and GMDS/GI Workshop "Biomedical Image and Signal Computing - BISC 2015"	no abstract available	17.09.2015 16:30
<i>* Atrial and ventricular signal averaging electrocardiography in pacemaker and cardiac resynchronization therapy</i>	Cyrus Haschemi (University of Applied Sciences Offenburg, Germany); Matthias Heinke (University of Applied Sciences Offenburg & Department of Electrical Engineering and Information Technology, Germany)	Track D	Biosignal Processing 2	D_43	17.09.2015 16:30

<i>Image Processing with Schrödinger's Equation</i>	Thomas Schanze (Technische Hochschule Mittelhessen, Germany)	Track D	FS:DGBMT and GMDS/GI Workshop "Biomedical Image and Signal Computing - BISC 2015"	D_44	17.09.2015 16:30
<i>Cardiorespiratory Coordination and Ensemble Symbolic Coupling Traces during Sleep</i>	Andreas Mueller, Maik Riedl and Jan F Kraemer (Humboldt-Universität zu Berlin, Germany); Thomas Penzel (Charité - Universitätsmedizin Berlin, Germany); Juergen Kurths (Humboldt University, Germany); Niels Wessel (HU Berlin, Germany)	Track D	Biosignal Processing 2	D_45	17.09.2015 16:30
<i>Diagnosis of Defects in Human Joints by Acoustic Emission Analysis (AEA)</i>	Jörg Subke (Technische Hochschule Mittelhessen, Germany); Judith Schmale and Andreas Kellotat (THM University of Applied Sciences, Germany); Burkhard Ziegler (Technische Hochschule Mittelhessen, Germany); Udo Wolf (University of Applied Sciences Fulda, Germany); Hans-Joachim Schwalbe (Technische Hochschule Mittelhessen, Germany); Ralf Franke and Peter Dörner (BoneDias, Germany)	Track D	Biosignal Processing 2	D_46	17.09.2015 16:30
<i>* Estimation of a respiratory signal from a single-lead ECG using 4th order central moments</i>	Marcus Schmidt (Otto-von-Guericke University Magdeburg, Germany); Andy Schumann (University Hospital Jena, Germany); Karl Jürgen Bär (University Hospital, Jena, Germany); Johannes W Krug (Otto-von-Guericke University of Magdeburg, Germany); Georg Rose (OVGU, Germany)	Track D	Biosignal Processing 3	D_47	18.09.2015 09:15
<i>Effects of pulsed anodal transcranial electrical stimulation at the eye</i>	Stefanie Freitag (Technische Universität Ilmenau, Germany); Alexander Hunold (Ilmenau University of Technology, Germany); Matthias Klemm (Technische Universität Ilmenau, Germany); Gernot Enders (OphthalmolInnovation GmbH, Germany); Edgar Nagel (Technische Universität Ilmenau, Germany); Jens Haueisen (Technical University Ilmenau, Germany)	Track D	Biosignal Processing 3	D_48	18.09.2015 09:15
<i>Spatial filtering of EEG data using SPHARA</i>	Uwe Graichen (Institute of Biomedical Engineering and Informatics (BMTI), TU Ilmenau, Germany); Patrique Fiedler and Daniel Strohmeier (Ilmenau University of Technology, Germany); Jens Haueisen (Technical University Ilmenau, Germany)	Track D	Biosignal Processing 3	D_49	18.09.2015 09:15
<i>Development of electrode and neuron models for a neuronal position estimation algorithm</i>	Martin Nguyen (Technische Hochschule Mittelhessen, Germany); Christopher Doerr (Technische Hochschule Mittelhessen THM, Germany); Thomas Schanze (Technische Hochschule Mittelhessen, Germany)	Track D	Biosignal Processing 3	D_50	18.09.2015 09:15

<i>Spatial interpolation of EEG by source space projection</i>	Melanie Knorr (Max Planck Institute for Human Cognitive and Brain Sciences, Germany); Thomas Knösche (MPI Leipzig, Germany)	Track D	Biosignal Processing 3	D_51	18.09.2015 09:15
<i>* Compressed Sensing of Multi-Lead ECG Signals by Compressive Multiplexing</i>	Timo Tigges and Janis Sarikas (TU Berlin, Germany); Michael Klum and Reinhold Orglmeister (Technische Universität Berlin, Germany)	Track D	Biosignal Processing 3	D_52	18.09.2015 09:15
<i>Influence of age and gender on the short-term heart rate variability in KORA S4 healthy subjects</i>	Andreas Voss and Rico Schroeder (University of Applied Sciences Jena, Germany); Siegfried Perz (GSF- Research Center for Environment and Health, Germany); Annette Peters (Helmholtz Zentrum München, Germany)	Track D	Biosignal Processing 4	no abstract available	18.09.2015 11:15
<i>Heart rate monitoring in ultra-high-field MRI using frequency information obtained from video signals of the human skin compared to electrocardiography and pulse oximetry</i>	Nicolai Spicher (University of Applied Sciences and Arts Dortmund, Germany); Stefan Maderwald (Erwin L. Hahn Institute for Magnetic Resonance Imaging, Germany); Mark Ladd (German Cancer Research Center, Germany); Markus Kukuk (University of Applied Sciences and Arts Dortmund, Germany)	Track D	Biosignal Processing 4	D_54	18.09.2015 11:15
<i>* Synchronization in wireless biomedical-sensor networks with Bluetooth Low Energy</i>	André Bideaux (Karlsruhe Institute of Technology, Germany); Bernd Zimmermann (KIT, Germany); Stefan Hey (Karlsruhe Institut of Technology, Germany); Wilhelm Stork (Karlsruhe Institute of Technology, Germany)	Track D	Biosignal Processing 4	D_55	18.09.2015 11:15
<i>Development of a HMM based posture recognition system to derive patient activity from a force sensor functionalized nursing bed</i>	Andreas Kitzig, Alexander Micheel and Gudrun Stockmanns (Niederrhein University of Applied Sciences, Germany); Reinhard Viga and Anton Grabmaier (University of Duisburg-Essen, Germany)	Track D	Biosignal Processing 4	D_56	18.09.2015 11:15
<i>Pulse Wave Analysis of Minuscule Ear Movements by Video Signal Processing</i>	Esther Scherer (University of Applied Sciences Luebeck, Germany); Roman Kusche (Lübeck University of Applied Sciences & Laboratory of Medical Electronics, Germany); Paula Klimach and Martin Ryschka (Lübeck University of Applied Sciences, Germany)	Track D	Biosignal Processing 4	D_57	18.09.2015 11:15



<i>Investigation of the perception of very low frequency sound and infra-sound using magnetoencephalography and functional magnetic resonance imaging</i>	Martin Bauer and Robert Kuehler (Physikalisch Technische Bundesanstalt, Germany); Markus Weichenberger (Max Planck Institut Berlin, Germany); Johannes Hensel (Physikalisch Technische Bundesanstalt, Germany); Simone Kuehn (Max Planck Institut Berlin, Germany); Bernd Ittermann (PTB Berlin, Germany); Lutz Trahms, Christian Koch and Tilmann Sander-Thoemmes (Physikalisch-Technische Bundesanstalt, Germany)	Track D	Biosignal Processing 4	D_58	18.09.2015 11:15
<i>* A novel coaxial nozzle for in-process adjustment of electrospun scaffolds' fiber diameter</i>	Alexander Becker, Birgit Glasmacher and Holger Zernetsch (Leibniz Universität Hannover, Germany); Marc Müller (Gottfried Wilhelm Leibniz Universität Hannover, Germany)	Track E	Cellular, Tissue and Bioengineering	E_01	16.09.2015 09:15
<i>* Processing of Membranes for Oxygenation Using the Bellhouse-Effect</i>	Christine Neußer and Christoph Bach (Department of Tissue Engineering and Textile Implants, Institut für Textiltechnik der RWTH Aachen, Germany); Janine Doeringer and Stefan Jockenhoewel (Department of Tissue Engineering and Textile Implants, Institut für Textiltechnik, Germany)	Track E	Cellular, Tissue and Bioengineering	E_02	16.09.2015 09:15
<i>Self-Aligning Mold for Hydrogel Micro Casting</i>	Stefan Hanitsch (Technische Universität Ilmenau, Germany); Martin Hoffmann (Technische Universitaet Ilmenau, Germany)	Track E	Cellular, Tissue and Bioengineering	E_03	16.09.2015 09:15
<i>Determination of near-bottom flow conditions in a cone-and-plate system bioreactor</i>	Moritz Freiherr von Wrangel and Lutz Dreyer (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Benjamin Krolitzki and Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track E	Cellular, Tissue and Bioengineering	E_04	16.09.2015 09:15
<i>* Inkjet printing of viable human dental follicle stem cells</i>	Robert Mau, Katja Kriebel, Hermann Lang and Hermann Seitz (University of Rostock, Germany)	Track E	Cellular, Tissue and Bioengineering	E_05	16.09.2015 09:15
<i>Characterisation of native stomach tissue of swine by uniaxial tensile testing</i>	Michael Bauer and Hanno Müller-Deile (Leibniz Universität Hannover, Germany); Tobias Schilling and Klaus Tim Kaufeld (Hannover Medical School, Germany); Martin Weidling and Peter Wriggers (Leibniz Universität Hannover, Germany); Axel Haverich (Medizinische Hochschule Hannover, Germany); Hans Jürgen Maier and Thomas Hassel (Leibniz Universität Hannover, Germany)	Track E	Cellular, Tissue and Bioengineering	E_06	16.09.2015 09:15
<i>Effect of electric field on tumor cell growth</i>	Lilia Hafner, Martin Brischwein and Bernhard Wolf (Technische Universität München, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_07	17.09.2015 14:30

<i>The use of an ice-binding-protein out of the snowflea <i>Hypogastrura harveyi</i> as a cryoprotectant in the cryopreservation of mesenchymal stem cells</i>	Marlene Vierthaler (Westfaelische Wilhelms Universitaet Muenster, Germany); Nicola Hofmann (Leibniz Universitaet Hannover & Institute for Multiphase Processes, Germany); Thomas Reinard (Leibniz Universitaet Hannover, Germany); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_08	17.09.2015 14:30
<i>Introduction of a novel in vitro system for electrical stimulation of bacteria</i>	Thomas Dauben (University Medicine Rostock, Germany); Josefin Ziebart (University of Rostock, Germany); Rainer Bader (Universität Rostock, Germany); Bernd Kreikemeyer (University Medicine Rostock, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_09	17.09.2015 14:30
<i>Fabrication and characterization of two-layered electrospun vascular grafts with varying pore sizes and fiber diameters</i>	Stefanie Borchert (Institute for Multiphase Processes, Leibniz University Hannover, Germany); Marc Müller (Gottfried Wilhelm Leibniz Universität Hannover, Germany); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_10	17.09.2015 14:30
<i>Influence of antioxidant N-Acetylcysteine on radical oxygen species (ROS) resistance and endothelial cells' morphology in the establishment of an endothelialized membrane oxvaenator</i>	Tobias Plein and Nicole Finocchiaro (RWTH Aachen University, Germany); Christian Cornelissen (Helmholtz Institute for Biomedical Engineering, RWTH Aachen, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_11	17.09.2015 14:30
<i>* New NIR spectroscopy based method to determine ischemia in vivo in liver - a first study on rats</i>	Matthias Lange (fzmb GmbH, Germany); Stephanie Liebold (FZMB Bad Langensalza, Germany); Chunyi Kan and Uta Dahmen (University Hospital Jena, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_12	17.09.2015 14:30
<i>Electromagnetic stimulation of human osteoblasts result in an enhanced cell viability and osteogenic differentiation</i>	Bettina Hiemer, Josefin Ziebart, Anika Jonitz-Heincke, Philipp Grunert and Yukun Su (University Medicine Rostock, Germany); Doris Hansmann (University of Rostock, Germany); Rainer Bader (Universität Rostock, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_13	17.09.2015 14:30

<i>Establishment of a novel in vitro system for electric stimulation of human osteoblasts</i>	Josefin Ziebart, Thomas Dauben, Yukun Su and Anika Jonitz-Heincke (University Medicine Rostock, Germany); Volker Weißmann (An-Institute of University of Wismar, Germany); Bernd Kreikemeyer (University Medicine Rostock, Germany); Barbara Nebe (Universität Rostock & Biomedical Res. Center, Germany); Rainer Bader (Universität Rostock, Germany)	Track E	Poster Session: Cellular, Tissue and Bioengineering	E_14	17.09.2015 14:30
<i>Numerical Simulations of Airflow in the Human Pharynx of OSAHS Patients</i>	Christina Kluck and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track E	FS: Individualisierte Implantate	E_15	18.09.2015 09:15
<i>Methods to reduce the light scattering for spectral analysis of blood components</i>	Felix Fiedler, Christian Stark and Stefan Mueller (Luebeck University of Applied Sciences, Germany)	Track F	Poster Session: New developments in monitoring	F_01	17.09.2015 14:30
<i>Evaluation of a multi-wavelength NIR system to determine lactate in human plasma</i>	Christian Stark, Felix Fiedler and Stefan Mueller (Luebeck University of Applied Sciences, Germany)	Track F	Poster Session: New developments in monitoring	F_02	17.09.2015 14:30
<i>Implementation of a Graphical User Interface (GUI) for patient-individualized, semi-automated PEEP-titration in injured lungs: a study in mechanically ventilated pigs</i>	Sara Lozano-Zahonero, Sarah Bühler, Hanna Runck and Steffen Wirth (University Medical Center Freiburg, Germany); Stefan Schumann (University Medical Center of Freiburg, Germany)	Track F	Poster Session: New developments in monitoring	F_03	17.09.2015 14:30
<i>Assessment of local lung inhomogeneity via electrical impedance tomography (EIT)</i>	Sarah Bühler, Krishen Ray and Sara Lozano-Zahonero (University Medical Center Freiburg, Germany); Hanna Runck (Universitätsklinikum Freiburg, Germany); Steffen Wirth (Hugstetter Strasse 55 79106 Freiburg, Germany); Stefan Schumann (University Medical Center of Freiburg, Germany)	Track F	Poster Session: New developments in monitoring	F_04	17.09.2015 14:30
<i>Development of a cuvette for an optical measurement setup to determine the concentration of blood components</i>	Felix Fiedler, Christian Stark, Nikolai Schmidt and Stefan Mueller (Luebeck University of Applied Sciences, Germany)	Track F	Poster Session: New developments in monitoring	F_05	17.09.2015 14:30

<i>* Adopting oculopressure tonometry as a transient in vivo rabbit glaucoma model</i>	Thomas Stahnke (Rostock University Medical Center & Institute for Biomedical Engineering, Germany); Stefan Siewert (Universität Rostock, Germany); Eleonore Walther (Rostock University Medical Center, Germany); Wolfram Schmidt, Oliver Stachs, Klaus-Peter Schmitz and Rudolf Guthoff (Universität Rostock, Germany)	Track F	Poster Session: New developments in monitoring	F_06	17.09.2015 14:30
<i>Scattering and its influencing parameters at the measurement of hemoglobin derivatives in non-hemolyzed human blood</i>	Benjamin Redmer (University of Applied Sciences Luebeck, Germany); Bodo Nestler (Fachhochschule Lübeck, Germany)	Track F	Poster Session: New developments in monitoring	F_07	17.09.2015 14:30
<i>Prototypical Implementation of a Novel Tagging System for Safe Localization of Devices in Medical Environments</i>	Kutaiba Saleh, Rudi Jäger, Danny Ammon, Martin Specht and Andreas Henkel (Jena University Hospital, Germany); Daniel Laqua (Technische Universität Ilmenau, Germany); Peter Husar (Technische Universität Ilmenau, Germany); Mike Wolf, Kurt Gerd Blau, Sher Ali Cheema and Martin Haardt (Technische Universität Ilmenau, Germany); Joerg Pospiech (AVT GmbH, Germany); Vincenz Busch and Thorsten Linnert (CE-SYS Engineering GmbH, Germany); Michael Nass (CE-LAB GmbH, Germany)	Track F	Poster Session: New developments in monitoring	F_08	17.09.2015 14:30
<i>* Next-generation vision testing: the quick CSF</i>	Michael Dorr, Manuel Wille and Tiberiu Violet (Adaptive Sensory Technology, Germany); Edward Sanchez, Peter Bex, Zhong-Lin Lu and Luis Lesmes (Adaptive Sensory Technology, USA)	Track F	Poster Session: New developments in monitoring	F_09	17.09.2015 14:30
<i>Real-time heart rate measurement from video recordings using different Kalman filter models</i>	Sebastian Zaunseder, Fernando Andreotti, Alexander Trumpp and Daniel Wedekind (TU Dresden, Germany); Hagen Malberg (Technische Universität Dresden, Germany)	Track F	New developments in monitoring	F_10	17.09.2015 16:30
<i>Bland-Altman analysis of differences to assess the eligibility of non-invasive continuous blood pressure monitors for perioperative application</i>	Robert Huhle and Joachim Siegert (Technische Universität Dresden, Germany); Fred Wonka (Medical Faculty TU Dresden, Germany); Ute Morgenstern (Technische Universität Dresden, Germany); Marcelo Gama de Abreu (University Hospital Dresden, Germany); Hermann Theilen (University Hospital Carl Gustav Carus, Germany)	Track F	New developments in monitoring	F_11	17.09.2015 16:30
<i>Detection and Identification of Human Metabolites using Ion Mobility Spectrometry</i>	Wolfgang Vautz (Institute for Analytical Sciences Dortmund, Germany)	Track F	New developments in monitoring	no abstract available	17.09.2015 16:30

<i>Monitoring of Hemodialysis Shunt Reflow</i>	Nils Ossenbrink (University of Applied Sciences Münster, Germany); Uvo M. Hölscher (Münster University of Applied Sciences, Germany)	Track F	New developments in monitoring	F_13	17.09.2015 16:30
<i>Integrity Monitoring of Infusion Systems</i>	David Grosse-Wentrup and Uvo M. Hölscher (Münster University of Applied Sciences, Germany)	Track F	New developments in monitoring	F_14	17.09.2015 16:30
<i>Continuous pulse rate monitoring of newborns using remote imaging photoplethysmography (riPPG)</i>	Daniel Matthes (HTWK Leipzig, University of Applied Sciences, Germany); Christoph Mönch (HTWK Leipzig, University of Applied Sciences & Hochschule Koblenz, University of Applied Sciences, Germany); Fabian Schrupf, Mirco Fuchs and Gerold Bausch (HTWK Leipzig, University of Applied Sciences, Germany)	Track F	New developments in monitoring	F_15	17.09.2015 16:30
<i>A Single Port Robotic System for Transanal Surgery</i>	Sebastian Matich, Carsten Neupert, Helmut F. Schlaak and Peter Pott (Technische Universität Darmstadt, Germany)	Track G	Devices and Systems for Surgical 1	G_01	16.09.2015 09:15
<i>* Towards structuring contextual information for workflow-driven surgical assistance functionalities</i>	Stefan Franke and Thomas Neumuth (Universität Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives I	G_02	16.09.2015 09:15
<i>* Improving tactile sensation in laparoscopic surgery by overcoming size restrictions</i>	Carina Wiederer (German Aerospace Center (DLR), Germany); Max Froehlich (Deutsches Zentrum für Luft- und Raumfahrt e. V. & DLR - German Aerospace Center, Germany); Michael Strohmayer (Deutsches Zentrum für Luft- und Raumfahrt e. V., Germany)	Track G	Devices and Systems for Surgical 1	G_03	16.09.2015 09:15
<i>* Towards a framework for standardized semantic workflow modeling and management in the surgical domain</i>	Juliane Neumann (University of Leipzig, Germany); Thomas Neumuth (Universität Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives I	G_04	16.09.2015 09:15
<i>* Design and control of a 3-DOF hydraulic driven surgical instrument</i>	Timo Cuntz and Laura Comella (Fraunhofer IPA, Germany)	Track G	Devices and Systems for Surgical 1	G_05	16.09.2015 09:15

<i>Computer Assisted Neurosurgery: Application of a surgical assistance system for cranial surface &amp; cerebral ventricle navigation</i>	Richard Bieck (Innovation Center Computer Assisted Surgery, University of Leipzig, Germany); Stefan Franke and Thomas Neumuth (Universität Leipzig, Germany); Dirk Lindner (Universitätsklinikum Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives I	G_06	16.09.2015 09:15
<i>* Evaluation of endourological tools to improve the diagnosis and therapy of ureteral tumors - from model development to clinical application</i>	David Wagner and Uwe-Bernd Liehr (Otto von Guericke University Magdeburg, Germany); Bertram Schmidt (Otto-von-Guerricke-University Magdeburg, Germany); Daniel Schindele and Johann Wendler (Otto von Guericke University Magdeburg, Germany); Markus Detert (Otto-von-Guericke University Magdeburg, Germany); Martin Schostak, Florian Bartel, Sandra Siedentopf, Anke Lux and Markus Porsch (Otto von Guericke University Magdeburg, Germany)	Track G	Devices and Systems for Surgical 1	G_07	16.09.2015 09:15
<i>* Closed-loop approach for situation awareness of medical devices and operating room infrastructure</i>	Max Rockstroh (Innovation Center Computer Assisted Surgery, Universität Leipzig, Germany); Stefan Franke and Thomas Neumuth (Universität Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives I	G_08	16.09.2015 09:15
<i>* Frequency based Assessment of Surgical Activities</i>	Marianne Maktabi and Sascha Vinz (University of Leipzig, Germany); Thomas Neumuth (Universität Leipzig, Germany)	Track G	Devices and Systems for Surgical 1	G_09	16.09.2015 09:15
<i>Experiences with Expert-based Probabilistic Modelling of Treatment Decisions using Bayesian Networks - with an Example of Chronic Rhinosinusitis</i>	Mario A. Cypko (University of Leipzig & ICCAS, Germany); Matthaues Stoehr (University Hospital of Leipzig, Germany); Stefanie Schlinke and David Hirsch (University of Leipzig, Germany); Susanne Modemann (International Reference and Development Centre for Surgical Technology, Germany); Kerstin Denecke (University of Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives I	G_10	16.09.2015 09:15
<i>The practical benefit of an evaluation software for surgical dissection techniques</i>	Anna Rasche (Aesculap AG, Germany); Stefan Eick (Aesculap AG, Tuttlingen, Germany); Olaf Hegemann (Aesculap AG & CO. KG, Germany); Marc Kraft (Technische Universität Berlin, Germany)	Track G	Devices and Systems for Surgical 1	G_11	16.09.2015 09:15
<i>Workflow Management in the Operating Room</i>	Thomas Neumuth (Universität Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision	no abstract available	16.09.2015 09:15

<i>Temperature prediction model for bone drilling based on density distribution and in vivo validation experiments</i>	Arne Feldmann, Juan Anso, Brett Bell, Tom Williamson, Kate Gavaghan, Nicolas Gerber, Helene Rohrbach, Stefan Weber and Philippe Zysset (University of Bern, Switzerland)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives II	G_13	16.09.2015 11:15
<i>* A generic concept for the development of model-guided clinical decision support systems</i>	Kerstin Denecke and Claire Chalopin (University of Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives II	no abstract available	16.09.2015 11:15
<i>Model-based brain tumor segmentation in intraoperative ultrasound images</i>	Juan Camacho (Universität Leipzig, Germany); Dirk Lindner (Universitätsklinikum Leipzig, Germany); Felix Arlt, Andrea Müns and Claire Chalopin (University of Leipzig, Germany)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives II	no abstract available	16.09.2015 11:15
<i>MRI-guided focused ultrasound: A computer-assisted theragnostic procedure</i>	Andreas Melzer (University of Dundee, United Kingdom)	Track G	FS: ICCAS session on Model-guided decision making in surgery: Latest research results and perspectives II	no abstract available	16.09.2015 11:15
<i>A biomechatronic approach to support explantation of endoprostheses</i>	Hendrik Kohlhof (Universitätsklinikum Bonn, Germany); Klaus Zimmermann (TU Ilmenau, Germany); Uwe Marschner (Technische Universität Dresden, Germany); Hartmut Witte (Technische Universität Ilmenau & Fachgebiet Biomechatronik, Germany)	Track G	Devices and Systems for Surgical Session 3	G_17	16.09.2015 13:45

<i>Heat generation during cutting of bone</i>	Britta Hering (Leibniz Universität Hannover, Germany)	Track G	Devices and Systems for Surgical Session 3	G_18	16.09.2015 13:45
<i>A new method for determination of the deflation time of balloon catheters</i>	Christoph Brandt (University of Rostock, Germany); Sarah Borowski (Universität Rostock, Germany); Frank Kamke (University Medical Center Rostock, Germany); Klaus-Peter Schmitz and Wolfram Schmidt (Universität Rostock, Germany)	Track G	Devices and Systems for Surgical Session 3	G_19	16.09.2015 13:45
<i>Stone/Tissue Differentiation for Holmium Laser Lithotripsy using Autofluorescence</i>	Birgit Lange (Medizinisches Laserzentrum Lübeck GmbH, Germany); Ralf Brinkmann (Medical Laser Centre Luebeck, Germany); Jens Cordes (Universitätsklinikum Schleswig-Holstein, Germany)	Track G	Devices and Systems for Surgical Session 3	G_20	16.09.2015 13:45
<i>In Vitro Investigation of Percutaneous Aortic Valve Laser Resection</i>	Ingo Rohde (Universität zu Lübeck, Germany); Ralf Brinkmann (Medical Laser Centre Luebeck, Germany); Georg Lutter (Universitätsklinikum Schleswig-Holstein, Germany); Dirk Theisen-Kunde (Medical Laser Centre Luebeck, Germany); Dominik Brunnhuber and Alexander Engel (Universitätsklinikum Schleswig-Holstein, Germany)	Track G	Devices and Systems for Surgical Session 3	G_21	16.09.2015 13:45
<i>Are there unmet needs of pediatric medical devices and surgical instruments?</i>	Ludger Tüshaus and Lutz Wunsch (University of Lübeck, Germany)	Track G	Devices and Systems for Surgical Session 3	G_22	16.09.2015 13:45
<i>* "Hands free for intervention", a new approach for transoral endoscopic surgery</i>	Axel Boese (Otto-von-Guericke-University Magdeburg, Germany); Markus Detert (Otto-von-Guericke University Magdeburg, Germany); Christian Stibbe and Michael Thiele (InKraft GmbH, Magdeburg, Germany); Christoph Arens (Otto-von-Guericke-University, Magdeburg, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_23	17.09.2015 14:30
<i>New antimicrobial surfaces - Studies for activity and durability</i>	Sebastian Buhl (Ostbayerische Technische Hochschule Amberg-Weiden, Germany); Josef Guggenbichler (Amistec GmbH&CoKG, Austria); Clemens Bulitta (Ostbayerische Technische Hochschule (OTH), Germany)	Track G	Poster Session: Devices and Systems for Surgical	no abstract available	17.09.2015 14:30
<i>Impact of floor-mounted versus ceiling-mounted angiography system installation on the laminar air flow in the hybrid OR</i>	Simon Woppert, Sebastian Buhl, Franz Magerl and Benjamin Russwurm (Ostbayerische Technische Hochschule Amberg-Weiden, Germany); Clemens Bulitta (Ostbayerische Technische Hochschule (OTH), Germany)	Track G	Poster Session: Devices and Systems for Surgical	no abstract available	17.09.2015 14:30



<i>Bionic Exoskeleton for Orthopaedic Surgery - Kinematic Structure</i>	Markus Hessinger, Roman Müller, Peter Pott and Roland Werthschützky (Technische Universität Darmstadt, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_26	17.09.2015 14:30
<i>* Pseudo-Haptic Feedback in Medical Teleoperation</i>	Carsten Neupert, Sebastian Matich, Peter Pott, Christian Hatzfeld and Roland Werthschützky (Technische Universität Darmstadt, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_27	17.09.2015 14:30
<i>Haptic User Interface for a Telerobotic Surgery System</i>	Carsten Neupert, Sebastian Matich, Peter Pott and Roland Werthschützky (Technische Universität Darmstadt, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_28	17.09.2015 14:30
<i>Development of a novel medical guide wire with a force sensing tip</i>	Nataliya Stefanova (Technische Universität Darmstadt, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_29	17.09.2015 14:30
<i>* Feasibility of interactive gesture control of a robotic microscope</i>	Sven-Thomas Antoni, Christian Sonnenburg, Thore Saathoff and Alexander Schlaefer (Hamburg University of Technology, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_30	17.09.2015 14:30
<i>Endoscopic Electropray: Enabling minimal invasive gene therapy</i>	David Hradetzky (University of Applied Sciences Northwestern Switzerland & School of Life Sciences, Switzerland); Stephan Böhringer (University of Applied Sciences Northwestern Switzerland, Switzerland); Paulius Ruzgys, Thomas Geiser and Amiq Gazdhar (University Hospital Bern, Switzerland)	Track G	Poster Session: Devices and Systems for Surgical	G_31	17.09.2015 14:30
<i>Characteristic curves of normothermic kidney machine perfusion</i>	Florian Tetschke and Marian Gransow (TU Dresden, Germany); Wenke Markgraf (Universitätsklinikum Dresden, Germany); Susanne Koch (TU Dresden, Germany); Ulf Aschenbrenner (Universitätsklinikum Dresden, Germany); Martin Janssen (Universitätsklinikum des Saarlandes, Germany); Christine Thiele (TU Dresden, Germany); Hagen Malberg (Technische Universität Dresden, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_32	17.09.2015 14:30
<i>Accuracy assessment of an electromagnetic navigation approach in orthognathic surgery</i>	Igor Nova (University of Heidelberg, Germany); Sebastian Kallus (Universität Heidelberg, Germany); Christoph Auer and Urs Eisenmann (University of Heidelberg, Germany); Moritz Berger and Robin Seeberger (University Hospital Heidelberg, Germany); Hartmut Dickhaus (University of Heidelberg, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_33	17.09.2015 14:30

<i>New minimally invasive epicardial pacemaker lead implantation technique utilizing an innovative steerable catheter system</i>	Marco Bartosch, Heiner Peters, Boris Schmitt, Felix Berger and Björn Peters (Deutsches Herzzentrum Berlin, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_34	17.09.2015 14:30
<i>Is it action painting or an operation? An in-vitro study to quantify the contamination of the surgeon during orthopaedic procedures</i>	Robert Wendlandt and Maria Thomas (University Medical Center Schleswig-Holstein, Germany); Benjamin Kienast (BG Trauma Hospital Hamburg, Germany); Arndt P Schulz, MRCS (University Medical Centre Schleswig Holstein & Biomechatronics Lübeck, Germany)	Track G	Poster Session: Devices and Systems for Surgical	G_35	17.09.2015 14:30
<i>A miniature guidance device for percutaneous CT-guided procedures - evaluation of an improved prototype in a swine cadaver model</i>	Christoph Wilkmann (RWTH Aachen University, Germany); Nobutake Ito (Tokyo Medical Center, Japan); Catherine Disselhorst-Klug (RWTH Aachen University & Institute of Applied Medical Engineering, Germany); Philipp Bruners (RWTH Aachen University Hospital, Germany)	Track I	Image Based Intervention	I_01	16.09.2015 09:15
<i>Multi-segment Tracking for Bony Reconstruction in Craniomaxillofacial Surgery</i>	Sebastian Kallus (Universität Heidelberg, Germany); Igor Nova, Christoph Auer and Urs Eisenmann (University of Heidelberg, Germany); Moritz Berger and Robin Seeberger (University Hospital Heidelberg, Germany); Hartmut Dickhaus (University of Heidelberg, Germany)	Track I	Image Based Intervention	I_02	16.09.2015 09:15
<i>* Integrating Multimodal Information for Intraoperative Assistance in Neurosurgery</i>	Urs Eisenmann and Roland Metzner (University of Heidelberg, Germany); Christian Rainer Wirtz (University Hospital Ulm, Germany); Hartmut Dickhaus (University of Heidelberg, Germany)	Track I	Image Based Intervention	I_03	16.09.2015 09:15
<i>Reduction of scattered radiation exposure in interventional surgery with an radiation protection cabin</i>	Matthias Köller (FH-Muenster, Germany)	Track I	Image Based Intervention	I_04	16.09.2015 09:15
<i>* Respiratory Motion Tracking using Microsoft's Kinect v2 Camera</i>	Floris Ernst and Philipp Saß (University of Lübeck, Germany)	Track I	Image Based Intervention	I_05	16.09.2015 09:15
<i>Tracking of Liver Vessel Bifurcations in 3-D+t Ultrasound</i>	Sebastian Schmitt, Christian Sobotta and Heinrich M. Overhoff (Westphalian University of Applied Sciences, Germany)	Track I	Image Based Intervention	I_06	16.09.2015 09:15

<i>Evaluation of the human corneal subbasal nerve plexus using surface parallel femtosecond laser cut corneal tissue</i>	Bhavani Kowtharapu (Institut für Biomedizinische Technik & University of Rostock, Germany); Marina Hovakimyan (Rostock University Medical Center, Germany); Fabian Will and Heiko Richter (Rowiak LaserLabSolutions GmbH, Germany); Andreas Wree and Rudolf Guthoff (Universität Rostock, Germany)	Track I	Poster Session: Image Based Intervention	I_07	17.09.2015 14:30
<i>* Using Smart Glasses for Ultrasound Diagnostics</i>	Stefan Maas, Marvin Ingler and Heinrich M. Overhoff (Westphalian University of Applied Sciences, Germany)	Track I	Poster Session: Image Based Intervention	I_08	17.09.2015 14:30
<i>Design of a novel individualized stereotactic frame for minimally invasive Cochlear Implant Surgery</i>	Omid Majdani (Hannover Medical School, Germany)	Track I	Poster Session: Image Based Intervention	no abstract available	17.09.2015 14:30
<i>A novel individualized stereotactic frame for minimally invasive Cochlear Implant Surgery</i>	Omid Majdani and Samuel John (Hannover Medical School, Germany); Jan-Philipp Kobler (Leibniz Universität Hannover, Germany); Jakob Lexow (Hannover Medical School, Germany); Johannes Gaa and Samuel Müller (Leibniz University Hannover, Germany); Lüder A. Kahrs and Tobias Ortmaier (Leibniz Universität Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Thomas S. Rau (Hannover Medical School, Germany)	Track I	Poster Session: Image Based Intervention	I_10	17.09.2015 14:30
<i>* Measurement of Needle Susceptibility Artifacts in Magnetic Resonance Images</i>	Sebastian Schmitt (Westphalian University of Applied Sciences, Germany); Katharina Skopnik (MR:comp GmbH, Germany); Heinrich M. Overhoff (Westphalian University of Applied Sciences, Germany)	Track I	Poster Session: Image Based Intervention	I_11	17.09.2015 14:30
<i>Using Optical Coherence Tomography for Experimental Visualisation of decalcified petrous bone</i>	Saleh Mohebbi (TUMS & MHH, Germany); Jesus Díaz Díaz (Leibniz Universität Hannover, Germany); Marjan Mirsalehi (Tehran University of Medical Sciences & Hannover Medical School, Germany); Lüder A. Kahrs and Tobias Ortmaier (Leibniz Universität Hannover, Germany); Thomas Lenarz (Hannover Medical school, Germany); Thomas S. Rau and Omid Majdani (Hannover Medical School, Germany)	Track I	Poster Session: Image Based Intervention	I_12	17.09.2015 14:30
<i>* Development and implementation of algorithms for automatic and robust measurement of the 2D:4D digit ratio using image data</i>	Robert Koch, Erik Haßlmeyer and Daniel Tantinger (Fraunhofer Institute for Integrated Circuits IIS, Germany); Martin Rulsch and Christian Weigand (Fraunhofer IIS, Germany); Matthias Struck (Fraunhofer Institute for Integrated Circuits, Germany)	Track J	Poster Session: Image Processing	J_01	17.09.2015 14:30

<i>* Automated high-throughput analysis of B cell spreading on immobilized antibodies with whole slide image data</i>	Veit Wiesmann (Fraunhofer Institute for Integrated Circuits IIS, Germany); Dorothea Reimer (Friedrich-Alexander University Erlangen-Nuremberg, Germany); Daniela Franz (Fraunhofer IIS & University of Erlangen-Nueremberg, Germany); Hanna Hüttmayer (Fraunhofer Institute for Integrated Circuits IIS, Germany); Dirk Mielenz (Friedrich-Alexander University Erlangen-Nuremberg, Germany); Thomas Wittenberg (Fraunhofer Institute for Integrated Circuits IIS, Germany)	Track J	Poster Session: Image Processing	J_02	17.09.2015 14:30
<i>* Tissue Segmentation from Head MRI: A Ground Truth Validation for Feature-Enhanced Tracking</i>	Tobias Wissel, Patrick Stüber and Benjamin Wagner (University of Luebeck, Germany); Achim Schweikard (Universität Lübeck, Germany); Floris Ernst (University of Lübeck, Germany)	Track J	Poster Session: Image Processing	J_03	17.09.2015 14:30
<i>Comparison of different algorithms for automated detection and tracking of fluorescence-labeled subviral particles</i>	Dennis Müller and Thomas Schanze (Technische Hochschule Mittelhessen, Germany)	Track J	Poster Session: Image Processing	J_04	17.09.2015 14:30
<i>* Video tracking of swimming rodents on a reflective water surface</i>	Olaf Christ (Albert-Ludwigs-University, Germany); Ulrich Hofmann (Uniklinik Freiburg, Germany)	Track J	Poster Session: Image Processing	J_05	17.09.2015 14:30
<i>* Dimensionality reduction of medical image descriptors for multimodal image registration</i>	Johanna Degen (University of Lübeck, Germany); Mattias Heinrich (Institute of Medical Informatics, Germany); Jan Modersitzki (Universität Lübeck, Germany)	Track J	Image Processing	J_06	18.09.2015 09:15
<i>* Experimental Evaluation of Different Weighting Schemes in Magnetic Particle Imaging Reconstruction</i>	Patryk Szwargulski (Universität zu Lübeck, Germany); Juergen Rahmer (Philips Technology GmbH, Germany); Mandy Ahlborg (Institute of Medical Engineering Universität zu Lübeck Germany, Germany); Christian Kaethner and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track J	Image Processing	J_07	18.09.2015 09:15
<i>* Evaluation of CT capability for the detection of thin bone structures</i>	Halla Gudfinnsdottir (Reykjavik University, Iceland); Thordur Helgason (Landspítali - University Hospital, Iceland)	Track J	Image Processing	J_08	18.09.2015 09:15
<i>A Study of Gaussian Noise Effects on Skin Thickness Measurement</i>	Jirapong Manit, Tobias Wissel and Patrick Stüber (University of Luebeck, Germany); Achim Schweikard (Universität Lübeck, Germany); Floris Ernst (University of Lübeck, Germany)	Track J	Image Processing	J_09	18.09.2015 09:15

<i>An ex vivo investigation of different brain tumors using Optical Coherence Tomography</i>	Marcel Lenz (Ruhr-Universität Bochum, Germany); Robin Krug and Kirsten Schmieder (University Hospital Knappschafts Krankenhaus Bochum-Langendreer, Germany); Martin Hofmann (Ruhr-Universität Bochum, Germany)	Track J	Image Processing	J_10	18.09.2015 09:15
<i>* Towards contactless optical coherence elastography with acoustic tissue excitation</i>	Dino Düwel, Christoph Otte, Kevin Schulz, Thore Saathoff and Alexander Schlaefer (Hamburg University of Technology, Germany)	Track J	Image Processing	J_11	18.09.2015 09:15
<i>Influence of Pt/Ir electrode thickness on magnetic resonance imaging susceptibility artefacts</i>	Johannes B Erhardt (University of Freiburg, Germany); Jochen Leupold (University Freiburg Medical Center, Germany); Erwin Fuhrer and Oliver G. Gruschke (Universität Freiburg - IMTEK, Germany); Matthias C Wapler (University of Freiburg, Germany); Jürgen Hennig (University Freiburg Medical Center, Germany); Jan G. Korvink (Universität Freiburg - IMTEK, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track K	Imaging 1: MRI	K_01	16.09.2015 09:15
<i>* MR-Imaging of model drug distribution in simulated vitreous</i>	Sandra Stein (University of Greifswald, Germany); Christian Loch (Ernst-Moritz-Arndt-Universität Greifswald, Germany); Sönke Langner (Universität Greifswald, Germany); Stefan Hadlich (Greifswald University Hospital, Germany); Oliver Stachs and Niels Grabow (Universität Rostock, Germany); Rudolf Guthoff (Universität Rostock & Universitätsaugenklinik Rostock, Germany); W. Weitschies (Universität Greifswald, Germany); Anne Seidlitz (Ernst-Moritz-Arndt-Universität Greifswald, Germany)	Track K	Imaging 1: MRI	K_02	16.09.2015 09:15
<i>* Studying the extracellular contribution to the double wave vector diffusion-weighted signal</i>	Patricia Ulloa (University of Lübeck, Germany); Viktor Wottschel (University College London, United Kingdom); Martin A. Koch (University of Lübeck, Germany)	Track K	Imaging 1: MRI	K_03	16.09.2015 09:15
<i>Analyzing the Impact of Different Path Termination Conditions in a Probabilistic Fiber Tracking Algorithm</i>	Schonlatis Ariyamitr (University of Lübeck, Germany); Martin A. Koch (University of Luebeck, Germany)	Track K	Imaging 1: MRI	no abstract available	16.09.2015 09:15

<i>Real-valued least-squares reconstruction for magnetic particle imaging in frequency space</i>	Martin Hofmann (Section for Biomedical Imaging, University Medical Center Hamburg-Eppendorf & Institute for Biomedical Imaging, Hamburg University of Technology, Germany); Martin Storath (Ecole Polytechnique Federale de Lausanne, Switzerland); Alexander Weber (Bruker BioSpin MRI GmbH, Germany); Tobias Knopp (Section for Biomedical Imaging, University Medical Center Hamburg-Eppendorf & Institute for Biomedical Imaging, Hamburg University of Technology, Germany)	Track K	Imaging 2: MPI	K_05	16.09.2015 11:15
<i>Reusing System Matrices at different Focus Field Positions in Magnetic Particle Imaging</i>	Tobias Knopp, Kolja Them, Franziska Werner and Martin Hofmann (Section for Biomedical Imaging, University Medical Center Hamburg-Eppendorf & Institute for Biomedical Imaging, Hamburg University of Technology, Germany)	Track K	Imaging 2: MPI	K_06	16.09.2015 11:15
<i>* Artifacts in Field Free Line Magnetic Particle Imaging in the Presence of Inhomogeneous and Nonlinear Magnetic Fields</i>	Hanne Medimagh, Patrick Weissert, Gael Bringout, Klaas Bente, Matthias Weber, Ksenija Gräfe, Aileen Cordes and Thorsten M. Buzug (University of Luebeck, Germany)	Track K	Imaging 2: MPI	K_07	16.09.2015 11:15
<i>The novel Berlin MPI-scanner facility</i>	Olaf Kosch and Frank Wiekhorst (Physikalisch-Technische Bundesanstalt, Germany); Harald Kratz, Jörg Schnorr and Matthias Taupitz (Charité - Universitätsmedizin Berlin, Germany); Lutz Trahms (Physikalisch-Technische Bundesanstalt, Germany)	Track K	Imaging 2: MPI	K_08	16.09.2015 11:15
<i>Introducing a frequency-tunable magnetic particle spectrometer</i>	André Behrends, Matthias Graeser and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track K	Imaging 2: MPI	K_09	16.09.2015 11:15
<i>* Imaging of aortic valve dynamics in 4D OCT</i>	Christian Schnabel, Anett Jannasch, Saskia Faak, Thomas Waldow and Edmund Koch (Technische Universität Dresden, Germany)	Track K	Imaging 3: Opt	K_10	17.09.2015 09:15
<i>* Intravascular optical coherence tomography (OCT) as an additional tool for the assessment of stent structures</i>	Thomas Hoffmann (Otto-von Guericke University Magdeburg, Germany); Axel Boese, Sylvia Glaßer and Martin Skalej (Otto-von-Guericke-University Magdeburg, Germany); Oliver Beuing (Otto-von-Guericke University Magdeburg, Germany)	Track K	Imaging 3: Opt	K_11	17.09.2015 09:15
<i>Simple concept for a wide-field lensless digital holographic microscope using a laser diode</i>	Adamou Adinda-Ougba (Ruhr-University Bochum, Germany); Nektarios Koukourakis (TU Dresden, Germany); Nils Gerhardt and Martin Hofmann (Ruhr-University Bochum, Germany)	Track K	Imaging 3: Opt	K_12	17.09.2015 09:15

<i>Evaluation Of Drug Distribution In Polymer-Based Local Drug Delivery Systems By Means Of Raman Microscopy</i>	Thomas Reske (Universität Rostock, Germany); Thomas Eickner (University of Rostock, Germany); Rudolf Guthoff (Universität Rostock, Germany)	Track K	Imaging 3: Opt	K_13	17.09.2015 09:15
<i>* Intraoperative Identification of somato-sensory brain areas using Optical Imaging and standard RGB camera equipment - a feasibility study</i>	Martin Oelschlägel and Tobias Meyer (Technische Universität Dresden, Institut für Biomedizinische Technik, Germany); Stephan Sobottka, Matthias Kirsch and Gabriele Schackert (Universitätsklinikum Carl Gustav Carus Dresden, Klinik und Poliklinik für Neurochirurgie, Germany); Ute Morgenstern (Technische Universität Dresden, Institut für Biomedizinische Technik, Germany)	Track K	Imaging 3: Opt	K_14	17.09.2015 09:15
<i>Contrast-enhanced imaging of magnetically labeled cells using magnetomotive optical coherence tomography</i>	Peter Cimalla, Theresa Werner, Kai Winkler and Claudia Müller (Technische Universität Dresden, Germany); Sebastian Wicht (IFW Dresden, Germany); Maria Gaertner (Technische Universität Dresden, Germany); Mirko Mehner (University of Technology Dresden & Medical Faculty, Germany); Julia Walther (University of Technology Dresden, Germany); Bernd Rellinghaus (IFW Dresden, Germany); Dierk Wittig (University of Technology Dresden, Germany); Mike O. Karl (German Center for Neurodegenerative Diseases (DZNE) & TU Dresden, Center for Regenerative Therapies Dresden (CTR), Germany); Marius Ader (Center for Regenerative Therapies Dresden, Germany); Richard Funk (University of Technology Dresden, Germany); Michael Brand (CRTD Dresden University of Technology, Germany); Edmund Koch (Technische Universität Dresden, Germany)	Track K	Imaging 3: Opt	K_15	17.09.2015 09:15
<i>Image formation in intravital microscopy studies of lung tissue and its impact on quantification results</i>	Maria Gaertner (Technische Universität Dresden, Germany); Kerstin Schirrmann (Charité - Universitätsmedizin Berlin, Germany); Christian Schnabel and Sven Meissner (Technische Universität Dresden, Germany); Ulrich Kertzscher (Charité - Universitätsmedizin Berlin, Germany); Lars Kirsten and Edmund Koch (Technische Universität Dresden, Germany)	Track K	Imaging 3: Opt	K_16	17.09.2015 09:15
<i>* Respiratory surface motion measurement by Microsoft Kinect: implementation and evaluation of a clinical setup</i>	Jonas Ortmüller (University Medical Center Hamburg-Eppendorf & Universität zu Lübeck, Germany); Tobias Gauer (University Medical Center Hamburg-Eppendorf, Germany); Matthias Wilms and Heinz Handels (University of Lübeck, Germany); René Werner (University Medical Center Hamburg-Eppendorf, Germany)	Track K	Imaging 3: Opt	K_17	17.09.2015 09:15

<i>Novel Flexible X-ray Waveguides</i>	Christian Wendt and Jörn Wochnowski (Fachhochschule Luebeck, Germany); Bjoern Schmekel (Harvard University, Germany)	Track K	Poster Session: Imaging	K_18	17.09.2015 14:30
<i>Verification of phantom materials and comparison with simulations based on literature data</i>	Jochen Schmid and Natalie Bauer (Karlsruher Institut für Technologie (KIT), Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track K	Poster Session: Imaging	K_19	17.09.2015 14:30
<i>Doppler optical coherence tomography imaging of the human tympanic membrane and its potential for the diagnosis of middle ear pathologies</i>	Lars Kirsten, Simon Baumgärtner, Anke Burkhardt, Jonas Golde, Julia Walther, Thomas Stoppe, Max Kemper, Matthias Bornitz, Thomas Zahnert and Edmund Koch (Technische Universität Dresden, Germany)	Track K	Poster Session: Imaging	K_20	17.09.2015 14:30
<i>* GPU-based Real-Time Generation of Large Ultrasound Volumes from Freehand 3D Sweeps</i>	Philipp Jauer (University of Lübeck, Germany); Franziska Hainer (University Hospital Schleswig-Holstein, Germany); Floris Ernst (University of Lübeck, Germany)	Track K	Poster Session: Imaging	K_21	17.09.2015 14:30
<i>Optical coherence tomography (OCT) aids paediatric burn assessment</i>	Vasileios Vasileiadis (University of Lübeck & Germany, Germany); Lutz Wunsch (University of Lübeck, Germany)	Track K	Poster Session: Imaging	K_22	17.09.2015 14:30
<i>O2, pH or CO2 Imaging Using Optical Chemical Sensors for Online Monitoring of Metabolic Activity</i>	Gregor Liebsch, Andreas Tegel and Thomas Gareis (PreSens GmbH, Germany)	Track K	Poster Session: Imaging	K_23	17.09.2015 14:30
<i>* Experimental computer tomograph - Investigation and implementation of iterative reconstruction techniques and modern computer technology</i>	David Heinemann (Technische Universität Ilmenau, Germany); Andreas Keller and Dunja Jannek (Ilmenau University of Technology, Germany)	Track K	Poster Session: Imaging	K_24	17.09.2015 14:30
<i>* Improving Image Quality in EIT Imaging by Measurement of Thorax Excursion</i>	Benjamin Schullcke, Bo Gong and Sabine Krueger-Ziolek (Furtwangen University, Germany); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track K	Imaging 4: EIT/ Xray	K_25	17.09.2015 16:30



<i>Lung imaging for quantification of ventilator induced lung injury</i>	Anja Braune, Andreas Gueldner, Andreef Michael and Liane Oehme (University Hospital Carl Gustav Carus, Germany); Thea Koch (Technische Universität Dresden, Germany); Jörg Kotzerke (University Hospital Carl Gustav Carus, Germany); Marcelo Gama de Abreu (University Hospital Dresden, Germany)	Track K	Imaging 4: EIT/Xray	K_26	17.09.2015 16:30
<i>Investigation of ventilation and perfusion related impedance changes of the lung as a function of heart rate</i>	Sabine Krüger-Ziolek, Zhanqi Zhao, Benjamin Schullcke and Bo Gong (Furtwangen University, Germany); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track K	Imaging 4: EIT/Xray	K_27	17.09.2015 16:30
<i>* A clustering based dual model framework for EIT imaging: first experimental results</i>	Bo Gong, Benjamin Schullcke and Sabine Krüger-Ziolek (Furtwangen University, Germany); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track K	Imaging 4: EIT/Xray	K_28	17.09.2015 16:30
<i>* Three-dimensional anisotropic regularization for limited angle tomography</i>	Fabian Isernhagen (University of Lübeck, Germany); Dirk Schäfer (Philips, Germany); Michael Grass (Philips Research Europe, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track K	Imaging 4: EIT/Xray	K_29	17.09.2015 16:30
<i>* US-tracked steered FUS in a respiratory ex vivo ovine liver phantom</i>	Jan Strehlow (Fraunhofer MEVIS, Germany); Xu Xiao (University of Dundee, United Kingdom); Markus Domschke (Johann Wolfgang Goethe-Universität, Germany); Michael Schwenke (Fraunhofer MEVIS, Germany); Ioannis Karakitsios and Senay Mihcin (University of Dundee, United Kingdom); Julia Schwaab (Mediri GmbH, Germany); Yoav Levy (InSightec Ltd., Israel); Tobias Preusser (Jacobs University of Bremen, Germany); Andreas Melzer (University of Dundee, United Kingdom)	Track K	FS: Ultraschall	K_30	16.09.2015 16:30
<i>Patient Specific Model for FUS of the Liver and other moving organs</i>	Tobias Preusser (Fraunhofer MEVIS, Germany); Mario Bezzi (Universita Degli Studi Di Roma La Sapienza, Italy); Jürgen W Jenne (Fraunhofer MEVIS & Mediri GmbH, Germany); Thomas Langø (SINTEF, Norway); Yoav Levy (InSightec Ltd., Israel); Michael Müller (IBSMM Engineering spol s. r. o., Germany); Giora Sat (GE Healthcare, Israel); Christine Tanner (Computer Vision Laboratory, ETH Zurich, Germany); Stephan Zangos (Johann Wolfgang Goethe University Frankfurt/Main, Germany); Matthias Günther (Fraunhofer Mevis, Bremen, Germany); Andreas Melzer (University of Dundee, United Kingdom)	Track K	FS: Ultraschall	K_31	16.09.2015 16:30

<i>Novel ultrasound research platform for biomedical applications</i>	Steffen Tretbar, Hans Joachim Welsch, Heinrich Fonfara, Christoph Risser, Steffen Weber and Holger J Hewener (Fraunhofer IBMT, Germany)	Track K	FS: Ultraschall	K_32	16.09.2015 16:30
<i>Optoacoustic systems and applications</i>	Marc Fournelle and Wolfgang Bost (Fraunhofer Institut für Biomedizinische Technik, Germany); Steffen Tretbar (Fraunhofer IBMT, Germany)	Track K	FS: Ultraschall	K_33	16.09.2015 16:30
<i>Motion Tracking Landmark Monitoring for HIFU</i>	Sven Rothlübbers (University of Bremen & MEDIRI, Germany); Julia Schwaab (Mediri GmbH, Germany); Matthias Günther (Fraunhofer Mevis, Bremen, Germany); Jürgen W Jenne (Fraunhofer MEVIS & Mediri GmbH, Germany)	Track K	FS: Ultraschall	K_34	16.09.2015 16:30
<i>Characterizing the imaging performance of magnetic tracers by Magnetic Particle Spectroscopy in an offset field</i>	Daniel Schmidt and Florian Palmetshofer (Physikalisch-Technische Bundesanstalt, Germany); David Heinke (Nanopet GmbH, Germany); Dirk Gutkelch, Patricia Radon and Uwe Steinhoff (Physikalisch-Technische Bundesanstalt, Germany)	Track L	Magnetic Methods in Medicine	L_01	16.09.2015 13:45
<i>SPIO processing in macrophages for MPI - the breast cancer MPI-SNLB-concept</i>	Dominique Finas (University of Lübeck & Evangelical Hospital Bielefeld, Germany); Janine Stegmann-Frehse and Benjamin Sauer (University of Lübeck, Germany); Gereon Hüttmann and Ksenija Gräfe (Universität zu Lübeck, Germany); Achim Rody (University of Lübeck, Germany); Thorsten M. Buzug and Kerstin Lüdtke-Buzug (Universität zu Lübeck, Germany)	Track L	Magnetic Methods in Medicine	L_02	16.09.2015 13:45
<i>Recent progress on mobility-MPI (mMPI)</i>	Thilo Viereck (Technische Universität Braunschweig, Germany); Christian Kuhlmann, Hilke Remmer, Meinhard Schilling and Frank Ludwig (TU Braunschweig, Germany)	Track L	Magnetic Methods in Medicine	no abstract available	16.09.2015 13:45
<i>Magnetic nanoparticle size separation analysis with temperature dependent magnetorelaxometry (TMRX)</i>	Christian Knopke (TU Berlin & Physikalisch-Technische Bundesanstalt, Germany); Norbert Löwa (Physikalisch Technische Bundesanstalt, Germany); Frank Wiekhorst and Lutz Trahms (Physikalisch-Technische Bundesanstalt, Germany)	Track L	Magnetic Methods in Medicine	L_04	16.09.2015 13:45
<i>The Effects of Measurement Uncertainties on Quantitative Magnetorelaxometry Imaging of Magnetic Nanoparticles</i>	Peter Hömmer (Technische Universität Ilmenau, Germany); Maik Liebl (Physikalisch-Technische Bundesanstalt, Germany); Daniel Baumgarten (Technische Universität Ilmenau, Germany)	Track L	Magnetic Methods in Medicine	L_05	16.09.2015 13:45
<i>Direct neuronal current detection using ultra low field nuclear magnetic resonance (ULF NMR)</i>	Nora Hoefner, Rainer Körber and Martin Burghoff (Physikalisch-Technische Bundesanstalt, Germany); Jens Haueisen (Technical University Ilmenau, Germany)	Track L	Magnetic Methods in Medicine	L_06	16.09.2015 13:45

<i>Intracellular heating of magnetoliposomes in pancreatic tumor cells</i>	Ulrich M Engelmann (RWTH Aachen University, Germany); Anjali Röth (RWTH Aachen University Hospital, Germany); Martin Baumann and Thomas Schmitz-Rode (RWTH Aachen University, Germany); Lutz Trahms (Physikalisch-Technische Bundesanstalt, Germany); Ioana Slabu (RWTH Aachen University, Germany)	Track L	Poster Session: Magnetic Methods in Medicine	L_07	17.09.2015 14:30
<i>Real-time quantification of magnetic nanoparticles in a flow phantom for magnetic targeting experiments using magnetic particle spectroscopy</i>	Patricia Radon (Physikalisch-Technische Bundesanstalt, Germany); Norbert Löwa (Physikalisch Technische Bundesanstalt, Germany); Frank Wiekhorst, Dirk Gutkelch and Lutz Trahms (Physikalisch-Technische Bundesanstalt, Germany)	Track L	Poster Session: Magnetic Methods in Medicine	L_08	17.09.2015 14:30
<i>X-space MPI (1D) using atomic magnetometry</i>	Victor Lebedev, Simone Colombo, Vladimir Dolgovskiy, Zoran Grujic and Antoine Weis (University of Fribourg, Switzerland)	Track L	Poster Session: Magnetic Methods in Medicine	L_09	17.09.2015 14:30
<i>* Contribution of Brownian Rotation and Particle Assembly Polarisation to the Particle Response in Magnetic Particle Spectrometry</i>	Anselm von Gladiß, Matthias Graeser, Kerstin Lütke-Buzug and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track L	Poster Session: Magnetic Methods in Medicine	L_10	17.09.2015 14:30
<i>* Preliminary investigations of magnetic modulated nanoparticles for microwave breast cancer detection</i>	Sebastian Ley and Marko Helbig (Technische Universität Ilmenau, Germany); Jürgen Sachs (Ilmenau University of Technology, Germany)	Track L	Poster Session: Magnetic Methods in Medicine	L_11	17.09.2015 14:30
<i>* Construction of a Device for Magnetic Separation of Superparamagnetic Iron Oxide Nanoparticles (SPIONs)</i>	Kerstin Lütke-Buzug, Kerstin Kläser and Matthias Graeser (Universität zu Lübeck, Germany)	Track L	Poster Session: Magnetic Methods in Medicine	L_12	17.09.2015 14:30
<i>Closed-loops in medical application - challenges and limitations</i>	Olaf Simanski (Hochschule Wismar - University of Applied Sciences: Technology, Business and Design, Germany); Thomas Schauer (Technische Universität Berlin, Germany); Michael Imhoff (Ruhr-University Bochum, Germany); Berno J.E. Misgeld (RWTH Aachen University, Germany)	Track M	FS: Closed loop control in medical technology	M_01	16.09.2015 16:30

<i>Concept of a Robotic Training System to Enhance Safety of Knee Joint Structures During Rehabilitative Strength Training</i>	Melanie Kolditz (RWTH Aachen University, Germany); Kirsten Albracht and Alessandro Fasse (German Sports University Cologne, Germany); Thivaharan Albin (RWTH Aachen University, Germany); Brüggemann Gert-Peter (German Sport University Cologne, Germany); Dirk Abel (RWTH Aachen University, Germany)	Track M	FS: Closed loop control in medical technology	M_02	16.09.2015 16:30
<i>Modelling and Control of the pneumatic part of a CPAP-Device</i>	Mathias Scheel (Hoffrichter GmbH / Hochschule Wismar, Germany); Andreas Berndt (Hoffrichter GmbH, Germany); Olaf Simanski (Hochschule Wismar - University of Applied Sciences: Technology, Business and Design, Germany)	Track M	FS: Closed loop control in medical technology	M_03	16.09.2015 16:30
<i>Artificial bi-hormonal closed-loop blood glucose control</i>	Thomas Schauer (Technische Universität Berlin, Germany)	Track M	FS: Closed loop control in medical technology	M_04	16.09.2015 16:30
<i>* Multichannel FES Parameterization for Controlling Foot Motion in Paretic Gait</i>	Thomas Seel, Mirjana Ruppel, Markus Valtin and Thomas Schauer (Technische Universität Berlin, Germany)	Track M	FS: Closed loop control in medical technology	M_05	16.09.2015 16:30
<i>Performance Testing and Validation of PCLC</i>	Michael Imhoff (Ruhr-University Bochum, Germany)	Track M	FS: Closed loop control in medical technology	M_06	16.09.2015 16:30
<i>Managing the Data Exchange Between a Service-Oriented Medical Device Architecture and Hospital Information Systems</i>	Josef Ingenerf and Björn Andersen (Universität zu Lübeck, Germany)	Track M	FS: Biomedical Engineering Meets Medical Informatics: Systematic Informationmanagement for a Better Health Care	M_07	17.09.2015 09:15
<i>Systematic Management of Pharmaceuticals in Hospitals and Social Care: The Cooperative Project iMediMan</i>	René Hempel and Holger Zipper (ifak e. V. Magdeburg, Germany)	Track M	FS: Biomedical Engineering Meets Medical Informatics: Systematic Informationmanagement for a Better Health Care	M_08	17.09.2015 09:15

<i>Systematic Planning of Mobile Applications for Palliative Care Patients</i>	Petra Knaup (Universität Heidelberg, Germany); Miriam Spies and Matthias Ganzinger (University of Heidelberg, Germany)	Track M	FS: Biomedical Engineering Meets Medical Informatics: Systematic Informationmanagement for a Better Health Care	M_09	17.09.2015 09:15
<i>Telehealth: Remote Patient Management based on systematic information management</i>	Martin Braecklein (DGBMT Fachausschuss Mobile Diagnose- und Therapiesysteme - mHealth & Linde Healthcare, Germany)	Track M	FS: Biomedical Engineering Meets Medical Informatics: Systematic Informationmanagement for a Better Health Care	M_10	17.09.2015 09:15
<i>A Concept for Linking Biological Models with Clinical Data for Decision Support</i>	Kerstin Denecke (Universität Leipzig, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	no abstract available	17.09.2015 14:30
<i>Smart Diabetic Insole - Towards home feet health monitoring in order to prevent diabetic foot ulcer</i>	Jens Grützner and Thorsten Szczepanski (ifak System GmbH, Germany); Juliane Kellersmann, Jan Malanowski, Silke Klose and Peter Mertens (Otto-von-Guericke-University Magdeburg, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	no abstract available	17.09.2015 14:30
<i>Telemedical concept for a nationwide malaria indication using the example of Cameroon</i>	Simon Hofmann, Carlos Fonseca, Claudius Noeh, Dupleix Takouleghe Fouellefack and Susanne Tran (Technische Hochschule Mittelhessen, Germany); Keywan Sohrabi (Technische Hochschule Mittelhessen – University of Applied Sciences, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_13	17.09.2015 14:30
<i>* An IHE-conform telecooperation platform supporting the treatment of dementia patients</i>	Kutaiba Saleh (Jena University Hospital, Germany); Danny Ammon, Steffen Lehnert, Sebastian Roehr and Vesselin Detschew (Technische Universität Ilmenau, Germany); Martin Specht and Andreas Henkel (Jena University Hospital, Germany); André Kaeding (GMC Systems mbH, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_14	17.09.2015 14:30

<i>Domestic Longterm Monitoring of COPD-Patients via Mobile Devices</i>	Andreas Haller and Sebastian Schuerg (Technische Hochschule Mittelhessen, Germany); Florian Schudt (Technische Hochschule Mittelhessen – University of Applied Sciences, Germany); Ljudmila Mursina (Technische Hochschule Mittelhessen, Germany); Andreas Koczulla (Philipps-University Marburg, Germany); Volker Gross and Keywan Sohrabi (Technische Hochschule Mittelhessen, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_15	17.09.2015 14:30
<i>An Open Web Interface Based Interoperability Systems Platform for Live Point of Care Surgical Applications</i>	Jörg-Uwe Meyer (University of Luebeck, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_16	17.09.2015 14:30
<i>* Kinect Based Physiotherapy System for Home Use</i>	Dominik Haas and Somphong Phommahavong (Furtwangen University, Germany); Jing Yu (Furtwangen University & Institute of Technical Medicine (ITeM), Germany); Sabine Krüger-Ziolek (Furtwangen University, Germany); Knut Möller (Hochschule Furtwangen, Germany); Jörn Kretschmer (Furtwangen University, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_17	17.09.2015 14:30
<i>* Evaluating the Microsoft Kinect Skeleton Joint Tracking as a Tool for Home-Based Physiotherapy</i>	Somphong Phommahavong and Dominik Haas (Furtwangen University, Germany); Jing Yu (Furtwangen University & Institute of Technical Medicine (ITeM), Germany); Sabine Krüger-Ziolek (Furtwangen University, Germany); Knut Möller (Hochschule Furtwangen, Germany); Jörn Kretschmer (Furtwangen University, Germany)	Track M	Poster Session: eHealth, mHealth and Telemedicine	M_18	17.09.2015 14:30
<i>Motivational strategies for children with orthosis supply</i>	Laura Doria and Susanne Dannehl (Technische Universität Berlin, Germany); Volker Kohl (nova motum Services & Consulting GmbH, Germany); Guido Körber (Code Mercenaries Hard- und Software GmbH, Germany); Michael Cassel (Universität Potsdam, Germany); Stefan Wilke and Holger Mellerowicz (HELIOS Klinikum Emil von Behring, Germany); Ralf Sage and Klaus Nahr (CCTEC Deutsches Korsettzentrum GBR, Germany); Marc Kraft (Technische Universität Berlin, Germany)	Track M	Telemedicine, eHealth, mHealth	M_19	18.09.2015 09:15
<i>* Automated Respiratory Therapy System Based on the ARDSNet Protocol with Systemic Perfusion Control</i>	Anake Pomprapa (RWTH Aachen University, Germany); Marian Walter (RWTH Aachen, Germany); Wolfgang Braun (Fritz Stephan GmbH, Germany); Burkhard Lachmann (Charité – Universitätsmedizin Berlin, Germany); Steffen Leonhardt (RWTH Aachen, Germany)	Track M	Telemedicine, eHealth, mHealth	M_20	18.09.2015 09:15

<i>Comprehensive mHealth assessment of visual function</i>	Michael Dorr (Technische Universität München; Adaptive Sensory Technology, Germany); Emily Wiecek (Adaptive Sensory Technology, USA); Kameran Lashkari (Advanced Eye Centers Inc., USA); Zhong-Lin Lu (Ohio State University; Adaptive Sensory Technology, USA); Luis Lesmes (Adaptive Sensory Technology, USA); Peter Bex (Northeastern University; Adaptive Sensory Technology, USA)	Track M	Telemedicine, eHealth, mHealth	M_21	18.09.2015 09:15
<i>* Identification of surgical instruments using UHF-RFID Technology</i>	Mohamed Bourouah (Institut für Mikro- und Informationstechnik der Hahn-Schickard-Gesellschaft, Germany)	Track M	Telemedicine, eHealth, mHealth	M_22	18.09.2015 09:15
<i>An adaptive fuzzy inference system used in diabetic management</i>	Ioana Tripa (University Politehnica Timisoara, Romania); Cosmin Cernazanu (Politehnica University of Timisoara, Romania); Doru Todinca (University Politehnica Timisoara, Romania)	Track M	Telemedicine, eHealth, mHealth	M_23	18.09.2015 09:15
<i>Automated quantification of IMU-data according to UPDRS for Parkinson's disease</i>	Roland Götzfried (Ulm University of Applied Sciences, Germany); Lennart K. Piro (Ludwig-Maximilians-University Munich, Germany); Neltje E. Piro and Ronald A. Blechschmidt-Trapp (Ulm University of Applied Sciences, Germany)	Track M	Telemedicine, eHealth, mHealth	M_24	18.09.2015 09:15
<i>Methylene blue and copper(II) chloride as dyes to mimic R/IR ratios in pulse oxymetry</i>	Benjamin Weber and Marc Kösling (Luebeck University of Applied Sciences, Germany); Bodo Nestler (Fachhochschule Lübeck, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_01	16.09.2015 13:45
<i>Development of a measurement setup to determine the drug release through a hydrogel diffusion barrier</i>	Jan Krieger (Lübeck University of Applied Sciences & Medical Sensors and Devices Laboratory, Germany); Christian Damiani (Fachhochschule Lübeck, Germany); Stephan Klein (Luebeck University of Applied Sciences, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_02	16.09.2015 13:45
<i>* Wireless Medical Sensors - Context, Robustness and Safety</i>	Christian Bollmeyer (Lübeck University of Applied Sciences & Graduate School for Computing in Medicine and Life Sciences, Universität zu Lübeck, Germany); Mathias Pelka (Fachhochschule Lübeck, Germany); Hartmut Gehring (University of Luebeck & Universitätsklinikum Schleswig-Holstein, Germany); Horst Hellbrück (University of Applied Sciences Lübeck & CoSA Center of Excellence, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_03	16.09.2015 13:45
<i>* Sequences for real-time Magnetic Particle Imaging</i>	Matthias Weber, Klaas Bente, Anselm von Gladiß, Matthias Graeser and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_04	16.09.2015 13:45

<i>* Speckle-based off-axis holographic detection for non-contact Photoacoustic Tomography</i>	Christian Buj, Jens Horstmann and Michael Münter (Universität zu Lübeck, Germany); Ralf Brinkmann (Medical Laser Centre Luebeck, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_05	16.09.2015 13:45
<i>* A machine learning approach for planning valve-sparing aortic root reconstruction</i>	Jannis Hagenah (University of Luebeck, Germany); Michael Scharfschwerdt (Universitätsklinikum Schleswig-Holstein, Germany); Alexander Schlaefer (Hamburg University of Technology, Germany); Christoph Metzner (Universität zu Lübeck, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_06	16.09.2015 13:45
<i>In vitro / in vivo measurements of protein dynamics at the endothelial surface layer</i>	Lars Kreutzburg, Vit Dolezal and Christian Hübner (Universität zu Lübeck, Germany)	Track N	FS: LUMEN - Luebeck Medical Engineering	N_07	16.09.2015 13:45
<i>Calibration services for health care</i>	Peter Lucas (VSL B V Dutch Metrology Institute, The Netherlands); Hugo Bissig (Federal Institute of Metrology METAS, Switzerland); Harm Petter (VSL B V Dutch Metrology Institute, The Netherlands); Elsa Batista (Portuguese Institute for Quality IPQ, Portugal); Florestan Ogheard (CETIAT, France); Anders Koustrup Niemann (Danish Technological Institute DTI, Denmark); Martin Ahrens (Luebeck University of Applied Sciences & Fachhochschule Lübeck, Germany)	Track N	FS: Low Liquid Flows in Medical Technology	N_08	16.09.2015 16:30
<i>A portable primary standard for very low flow applications</i>	Hugo Bissig, Martin Tschannen and Marc de Huu (Federal Institute of Metrology METAS, Switzerland)	Track N	FS: Low Liquid Flows in Medical Technology	N_09	16.09.2015 16:30
<i>* Analysis of the release kinetics of surface-bound proteins via laser-induced fluorescence</i>	Thomas Pollack (Universität Rostock, Germany); Marc Dangers (DST Diagnostische Systeme & Technologien GmbH, Germany); Hermann Seitz (University of Rostock, Germany)	Track N	FS: Low Liquid Flows in Medical Technology	N_10	16.09.2015 16:30
<i>On-Chip-Imaging Flow Cytometry and Cell Sorting</i>	Thomas Henkel (Institute of Photonic Technology e.V. (IPHT), Germany)	Track N	FS: Low Liquid Flows in Medical Technology	N_11	16.09.2015 16:30
<i>* Tomographic Particle Image Velocimetry of a water-jet for low volume harvesting of fat tissue for regenerative medicine</i>	Christoph Drobek, Robert Mau and Hermann Seitz (University of Rostock, Germany)	Track N	FS: Low Liquid Flows in Medical Technology	N_12	16.09.2015 16:30



<i>Optical methods to measure fast changing liquid micro flow</i>	Joerg Schroeter and Birhanu Alemayehu (Luebeck University of Applied Sciences, Germany); Stephan Klein (FH Lübeck, Germany); Bodo Nestler (Fachhochschule Lübeck, Germany)	Track N	FS: Low Liquid Flows in Medical Technology	N_13	16.09.2015 16:30
<i>* Influence of short-term fixation with mixed formalin or ethanol solution on the mechanical properties of human cortical bone</i>	Enrico Mick (Department of Orthopaedics, University Medicine Rostock, Germany); Hanno Steinke and Thomas Wolfskämpf (University of Leipzig, Germany); Jan Wieding (University of Rostock, Germany); Niels Hammer (University of Leipzig, Germany); Marko Schulze (University Medicine Rostock, Germany); Robert Souffrant and Rainer Bader (Universität Rostock, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_14	17.09.2015 14:30
<i>Advanced short-pulsed high-field electromagnetic dipoles for laser-based proton therapy</i>	Michael Schürer (OncoRay - National Center for Radiation Research in Oncology, Dresden, Germany); Thomas Herrmannsdörfer (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Leonhard Karsch (OncoRay - National Center for Radiation Research in Oncology, Dresden, Germany); Florian Kroll (Helmholtz-Zentrum Dresden - Rossendorf, Germany); Umar Masood and Jörg Pawelke (OncoRay - National Center for Radiation Research in Oncology, Dresden, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_15	17.09.2015 14:30
<i>Beyond Science: The commercialization of a good idea</i>	Eckard Glaser (Corscience GmbH & Co. KG, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_16	17.09.2015 14:30
<i>A non-invasive technique for the determination of temperature changes using optoacoustics and optical coherence tomography</i>	Meike Lawin (University of Luebeck & Medical Laser Center Luebeck GmbH, Germany); Alexander Baade (University of Luebeck, Germany); Kerstin Schlott (Institute for Biomedical Optics, Germany); Ralf Brinkmann (Medical Laser Centre Luebeck, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_17	17.09.2015 14:30
<i>* QRS and QT ventricular conduction times and permanent pacemaker therapy after transcatheter aortic valve implantation</i>	Pierre Christian Takam (University of Applied Sciences Offenburg, Germany); Dietmar Höfflin (Universitätshertzzentrum Freiburg-Bad Krozingen, Germany); Matthias Heinke (University of Applied Sciences Offenburg & Department of Electrical Engineering and Information Technology, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_18	17.09.2015 14:30
<i>Different ECG Lead I Placement for Daily Heart Monitoring</i>	Aulia Iskandar (Julius-Maximilians-Universität Würzburg, Germany); Wolfram Voelker (Unversitaetsklinikum Wuerzburg, Germany); Klaus Schilling (University of Würzburg, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_19	17.09.2015 14:30

<i>Development of nanoparticle formulations for ultrasound triggered drug delivery to tumour tissue</i>	Alexander Grebner (University of Erlangen-Nuremberg, Germany)	Track N	Poster session: Miscellaneous and Special Sessions	N_20	17.09.2015 14:30
<i>Systems Engineering for innovative systems development</i>	Martin Rabe (Fraunhofer Institute for Production Technology IPT - Project Group Mechatronic Systems Design, Germany); Christian Tschirner (Fraunhofer Institute for Production Technology IPT & Project Group Mechatronic Systems Design, Germany)	TRack N	FS: Innovation Management in Medical Engineering	N_21	17.09.2015 16:30
<i>HTA - Knowledge networking for improved development processes</i>	Hans-Peter Dauben (German Institute for Medical Documentation and Information, Germany)	TRack N	FS: Innovation Management in Medical Engineering	no abstract available	17.09.2015 16:30
<i>Open Innovation in Philips Research</i>	Timo Paulus (Philips Technologie GmbH Innovative Technologies, Germany)	TRack N	FS: Innovation Management in Medical Engineering	N_23	17.09.2015 16:30
<i>Mapping german patent applications to next generation technologies in biomedical engineering</i>	Patrick Jüptner (RWTH Aachen, Germany); Frederik Klöckner (Institute of Applied Medical Engineering, RWTH Aachen, Germany); Mark Bukowski and Robert Farkas (RWTH Aachen University & Institute of Applied Medical Engineering AME, Germany)	TRack N	FS: Innovation Management in Medical Engineering	N_24	17.09.2015 16:30
<i>Can we shortcut medical product development processes?</i>	Wolfgang Weber and Stephan Blab (EXCO GmbH, Germany)	TRack N	FS: Innovation Management in Medical Engineering	N_25	17.09.2015 16:30
<i>* Evaluation of local alterations in femoral bone mineral density measured via quantitative CT</i>	Annette Sitzer, Linda Aulmann and Robert Wendlandt (University Medical Center Schleswig-Holstein, Germany); Heinz Handels and Imke Weyers (University of Lübeck, Germany); Arndt P Schulz, MRCS (University Medical Centre Schleswig Holstein & Biomechanics Lübeck, Germany); Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track N	Miscellaneous and Special Sessions	N_26	18.09.2015 09:15
<i>Pressure transducer for medical applications</i>	Sabrina Kartmann (University of Freiburg - IMTEK, Germany); Peter Koltay (Universität Freiburg - IMTEK, Germany); Andreas Ernst (University of Freiburg & BioFluidix GmbH, Germany)	Track N	Miscellaneous and Special Sessions	N_27	18.09.2015 09:15

<i>Improved automated blood gas control during extracorporeal life support</i>	Marian Gransow and Florian Tetschke (TU Dresden, Germany); Wenke Markgraf (Universitätsklinikum Dresden, Germany); Susanne Koch (TU Dresden, Germany); Ulf Aschenbrenner (Universitätsklinikum Dresden, Germany); Christine Thiele and Hagen Malberg (TU Dresden, Germany)	Track N	Miscellaneous and Special Sessions	N_28	18.09.2015 09:15
<i>* Creating 3D Gelatin Phantoms for Experimental Evaluation in Biomedicine</i>	Nils Stein, Thore Saathoff, Sven-Thomas Antoni and Alexander Schlaefer (Hamburg University of Technology, Germany)	Track N	Miscellaneous and Special Sessions	N_29	18.09.2015 09:15
<i>Development of a Neural Recording Mixed Signal Integrated Circuit for Biomedical Signal Acquisition</i>	Andreas Bahr (TU Hamburg-Harburg, Germany); Lait Abu Saleh (Hamburg university of Technology, Germany); Dietmar Schroeder and Wolfgang Krautschneider (Hamburg University of Technology, Germany)	Track N	Miscellaneous and Special Sessions	N_30	18.09.2015 09:15
<i>Effects of periodic tidal volume variation on gas exchange in experimental acute respiratory distress syndrome</i>	Robert Huhle (Technische Universität Dresden, Germany); Andreas Gueldner (University Hospital Carl Gustav Carus, Germany); Thea Koch (Technische Universität Dresden, Germany); Spieth Peter and Marcelo Gama de Abreu (University Hospital Dresden, Germany)	Track N	Miscellaneous and Special Sessions	N_31	18.09.2015 09:15
<i>Quantification of contrast agent transport in a porous scaffold using <math>\mu</math>-CT</i>	Tobias F. Klepsch, Mathias R Steffner and Henrik Botterweck (Lübeck University of Applied Sciences, Germany)	Track N	Poster Session: FS: LUMEN - Luebeck Medical Engineering	N_32	17.09.2015 14:30
<i>* An In-Ear Pulse Wave Velocity Measurement System Using Heart Sounds as Time Reference</i>	Roman Kusche (Lübeck University of Applied Sciences & Laboratory of Medical Electronics, Germany); Paula Klimach (Lübeck University of Applied Sciences, Germany); Ankit Malhotra (Universität zu Lübeck, Germany); Steffen Kaufmann and Martin Ryschka (Lübeck University of Applied Sciences, Germany)	Track N	Poster Session: FS: LUMEN - Luebeck Medical Engineering	N_33	17.09.2015 14:30
<i>* Measuring different oxygenation levels in a blood perfusion model simulating the human head using NIRS - Preliminary results of model evaluation measurements</i>	Klaas Rackebrandt (Universität zu Lübeck, Germany); Hartmut Gehring (University of Luebeck & Universitätsklinikum Schleswig-Holstein, Germany)	Track N	Poster Session: FS: LUMEN - Luebeck Medical Engineering	N_34	17.09.2015 14:30

<i>* Multisegmental fusion of the lumbar spine a curse or a blessing? A MultiBodySimulation (MBS) Modeling</i>	Sabine Bauer (University Koblenz-Landau, Germany); Dietrich Paulus (Universität Koblenz-Landau, Germany)	Track O	Biomechanical Modeling	O_01	16.09.2015 11:15
<i>Simulation of the effects of different surgical procedures in the lumbar spine by multi body simulation (mbs) computer modelling</i>	Karin Gruber (Universität Koblenz-Landau, Germany)	Track O	Biomechanical Modeling	O_02	16.09.2015 11:15
<i>Load Distribution Between the Two Cephalic Screws in the EBA2 Intramedullary Femoral Nail</i>	Julia Henschel (BGU Murnau, Germany); Peter Augat (Institute of Biomechanics Murnau, Germany)	Track O	Biomechanical Modeling	O_03	16.09.2015 11:15
<i>* Numerical analysis of the biomechanical complications accompanying the total hip replacement with NANOS-Prosthetic: bone remodelling and prosthesis migration</i>	Bernd-Arno Behrens and Anas Bouguecha (Leibniz Universität Hannover, Germany); Stefanie Betancur Escobar (Leibniz Universitaet Hannover & Institute for Metal Forming and Metal Forming Machine, Germany); Matthias Lerch and Christina Stukenborg-Colsman (Hannover Medical School, Germany); Ingo Nolte (University of Veterinary Medicine Hanover, Germany); Karin Lucas (University of Veterinary Medicine Foundation Hannover, Germany); Amer Almohallami (Leibniz Universität Hannover, Germany)	Track O	Biomechanical Modeling	O_04	16.09.2015 11:15
<i>Simulation of varying femoral attachment sites of medial patellofemoral ligament using a musculoskeletal multi-body model</i>	Andreas Geier and Thomas Tischer (University Medicine Rostock, Germany); Rainer Bader (Universität Rostock, Germany)	Track O	Biomechanical Modeling	O_05	16.09.2015 11:15
<i>* A Muscle Model for Hybrid Muscle Activation</i>	Christian Klauer and Maximilian Imer (TU-Berlin, Germany); Thomas Schauer (Technische Universität Berlin, Germany)	Track O	Biomechanical Modeling	O_06	16.09.2015 11:15
<i>* A Java Based Simulator with User Interface to Simulate Ventilated Patients</i>	Patrick Stehle (Furtwangen University, Germany); Thomas Lehmann (Furtwangen University & Institute for Technical Medicine, Germany); Daniel Redmond (University of Canterbury, New Zealand); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany); Jörn Kretschmer (Furtwangen University, Germany)	Track O	Modeling Ventilation, Infusion and Flow	O_07	16.09.2015 13:45

<i>Hierarchical identification in a three-parameter model of pulmonary gas exchange</i>	Axel Riedlinger and Jörn Kretschmer (Furtwangen University, Germany); Knut Möller (Hochschule Furtwangen, Germany)	Track O	Modeling Ventilation, Infusion and Flow	O_08	16.09.2015 13:45
<i>* Evaluation of an algorithm to choose between competing models of respiratory mechanics</i>	Jörn Kretschmer and Axel Riedlinger (Furtwangen University, Germany); Knut Möller (Hochschule Furtwangen, Germany)	Track O	Modeling Ventilation, Infusion and Flow	O_09	16.09.2015 13:45
<i>Systematic assessment of physical factors causing dosing error in multi-infusion setups: theoretical modelling and experimental results</i>	Roland Snijder, Joris Radermacher and Maurits Konings (University Medical Center Utrecht, The Netherlands)	Track O	Modeling Ventilation, Infusion and Flow	O_10	16.09.2015 13:45
<i>* Numerical simulation of low-pulsation gerotor pumps for use in the pharmaceutical industry and in biomedicine</i>	Vincent Klopsch, Tomas Germann and Hermann Seitz (University of Rostock, Germany)	Track O	Modeling Ventilation, Infusion and Flow	O_11	16.09.2015 13:45
<i>* Numerical and experimental flow analysis in centifluidic systems for rapid allergy screening tests</i>	Manuel Dethloff and Hermann Seitz (University of Rostock, Germany); Marc Dangers and Boris Wilmes (DST Diagnostische Systeme & Technologien GmbH, Germany)	Track O	Modeling Ventilation, Infusion and Flow	O_12	16.09.2015 13:45
<i>Development of a model of the electrically stimulated auditory nerve</i>	Waldo Nogueira (Medical University Hannover, Germany); Go Ashida (University of Oldenburg, Germany); Richard Penninger and Andreas Buechner (Medical University of Hannover, Germany)	Track O	Modeling in Audiology and Neurology	O_13	16.09.2015 16:30
<i>Simulation used for Feasibility Study of fluid-actuated Cochlear Implant Electrodes</i>	Silke Hügl (Hannover Medical School (MHH) & VIANNA - Institute for Audioneurotechnology, Germany); Stefan Griebel and Mirna Issa (Ilmenau University of Technology, Germany); Clemens Wystup (Technische Universität Ilmenau, Germany); Lena Zentner (Ilmenau University of Technology, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Omid Majdani and Thomas S. Rau (Hannover Medical School, Germany)	Track O	Modeling in Audiology and Neurology	O_14	16.09.2015 16:30
<i>A Cochlea Test Rig for the Analysis of Basilar Membrane Oscillations</i>	Daniel Schurzig and Thomas S. Rau (Hannover Medical School, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Omid Majdani (Hannover Medical School, Germany)	Track O	Modeling in Audiology and Neurology	O_15	16.09.2015 16:30

<i>Optimized stimulation protocols in transcranial current stimulation</i>	Sven Wagner, Simon Homölle and Martin Burger (University of Münster, Germany); Carsten H. Wolters (Institute for Biomagnetism and Biosignalanalysis, Germany)	Track O	Modeling in Audiology and Neurology	O_16	16.09.2015 16:30
<i>Transcranial Direct Current Stimulation Establishes Additional Functional Links in a Computational Brain Network Model</i>	Tim Kunze (Ilmenau University of Technology & Max Planck Institute for Human Cognitive and Brain Sciences, Germany); Alexander Hunold (Ilmenau University of Technology, Germany); Jens Hauelsen (Technical University Ilmenau, Germany); Viktor Jirsa and Andreas Spiegler (Aix-Marseille Université, France)	Track O	Modeling in Audiology and Neurology	O_17	16.09.2015 16:30
<i>A model of K-complexes and slow oscillations of NREM sleep</i>	Arne Weigenand and Michael Schellenberger Costa (University of Luebeck, Germany); Hong-Viet Ngo (University of Tuebingen, Germany); Matthias Mölle (Center of Brain, Behavior and Metabolism, University of Luebeck, Germany); Lisa Marshall (University of Luebeck, Germany); Jens Christian Claussen (University of Lübeck, Germany); Thomas Martinetz (University of Luebeck, Germany)	Track O	Modeling in Audiology and Neurology	O_18	16.09.2015 16:30
<i>Contracting silicone ventricles and an anatomical aorta in an anatomical mock heart circulation loop</i>	So-Hyun Jansen-Park, Indra Müller, Daniel Miesel, Jens von den Berken, Moritz Lommel and Simon Sonntag (Institute of Applied Medical Engineering, Helmholtz Institute, RWTH Aachen, Germany); Ulrich Steinseifer (RWTH Aachen University, Germany)	Track O	Cardio-vascular Modeling I	O_19	17.09.2015 09:15
<i>* Mathematical, numerical and in-vitro investigation of cooling performance of an intra-carotid catheter for selective brain hypothermia</i>	Julia Wolfertz (Acandis GmbH, Germany); Stephan Meckel (University Hospital Freiburg, Germany); Andreas Guber (KIT - Karlsruher Institut für Technologie, Germany); Giorgio FM Cattaneo (Acandis GmbH & Co. KG, Germany)	Track O	Cardio-vascular Modeling I	O_20	17.09.2015 09:15
<i>Lagrangian approach for simulation of thrombus formation in a stented vessel</i>	Michael Stiehm (University of Rostock & Germany, Germany); Daniel Quosdorf (Technische Universität München, Germany); Alfred Leder, Niels Grabow and Klaus-Peter Schmitz (Universität Rostock, Germany)	Track O	Cardio-vascular Modeling I	O_21	17.09.2015 09:15
<i>3D-printed Kidney Model Based on Medical Imaging Data</i>	Fabian Adams (Max Planck Institute for Intelligent Systems & Uni Medical Centre Freiburg, Germany); Tian Qiu (Max Planck Institute for Intelligent Systems & Institute of Bioengineering, EPFL, Germany); Bram Stieltjes (University Medical Centre Basel, Germany); Arkadiusz Miernik and Ulrich Wetterauer (University Medical Centre Freiburg, Germany); Peer Fischer (Max Planck Institute for Intelligent Systems & Universität Stuttgart, Germany)	Track O	Cardio-vascular Modeling I	O_22	17.09.2015 09:15

<i>Method of fundamental solutions in the inverse problem of ECG</i>	Danila Potyagaylo, Walther H W Schulze and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling I	O_23	17.09.2015 09:15
<i>* An ideally parameterized unscented Kalman filter for the inverse problem of electrocardiography</i>	Christian Ritter (Karlsruhe Institute of Technology, Germany); Walther H W Schulze, Danila Potyagaylo and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling I	O_24	17.09.2015 09:15
<i>* Biomechanical parameter determination of scaffold-free cartilage constructs (SFCCs) with the hyperelastic material models Yeoh, Ogden and Demiray</i>	Thomas Reuter (fzmb GmbH - Forschungszentrum für Medizintechnik und Biotechnologie, Germany); Igor Ponomarev (fzmb GmbH, Germany)	Track O	Poster Session: Modeling	O_25	17.09.2015 14:30
<i>Quasi-static hyperelastic parameter identification of the passive human biceps in vivo</i>	Christof Clemen, Andreas Schmidt, Christophe Then, Günther Benderoth and Gerhard Silber (Frankfurt University of Applied Sciences, Germany)	Track O	Poster Session: Modeling	O_26	17.09.2015 14:30
<i>Method for the determination of Euler-Cauchy stresses in tensile tests of semi-crystalline thermoplastic polymers</i>	Kerstin Schuemann (Universität Rostock, Germany); Udo Röhr (University of Rostock, Germany); Heiner Martin, Klaus-Peter Schmitz and Niels Grabow (Universität Rostock, Germany)	Track O	Poster Session: Modeling	O_27	17.09.2015 14:30
<i>Patient based tissue attenuation curves simulated at a perfusion phantom</i>	Sebastian Gugel and Pascal Mier (Otto-von-Guericke-University Magdeburg, Germany); Georg Rose (OVGU, Germany)	Track O	Poster Session: Modeling	O_28	17.09.2015 14:30
<i>* FPGA controlled artificial vascular system</i>	Daniel Laqua (Technische Universität Ilmenau & Institute for Biomedical Engineering and Informatics, Germany); Carina Brieskorn, Jan Hannes Koch, Markus Rothmayer, Steve Zeiske, Marcel Böttrich and Sebastian Ley (Technische Universität Ilmenau, Germany); Peter Husar (Technische Universität Ilmenau, Germany)	Track O	Poster Session: Modeling	O_29	17.09.2015 14:30
<i>* Simulation based investigation of source-detector configurations for non-invasive fetal pulse oximetry</i>	Marcel Böttrich and Sebastian Ley (Technische Universität Ilmenau, Germany); Peter Husar (Technische Universität Ilmenau, Germany)	Track O	Poster Session: Modeling	O_30	17.09.2015 14:30

<i>* Test setup for characterizing the efficacy of embolic protection devices</i>	Jörn-Bo Matthies (Institut für Biomedizinische Technik, Universität Rostock, Germany); Anja Kurzhals (Universitätsmedizin Rostock - Institut für Biomedizinische Technik, Germany); Wolfram Schmidt (Universität Rostock, Germany); Reimer Andresen (Institut f. Diagnostische u. Interventionelle Radiologie / Neuroradiologie Heide, Germany); Klaus-Peter Schmitz and Niels Grabow (Universität Rostock, Germany)	Track O	Poster Session: Modeling	O_31	17.09.2015 14:30
<i>Limits and abilities of a fluorescence lifetime based approach to separate two fluorescent layers</i>	Matthias Klemm (Technische Universität Ilmenau, Germany); Dietrich Schweitzer (University of Jena, Germany); Jens Hauelsen (Technical University Ilmenau, Germany)	Track O	Poster Session: Modeling	O_32	17.09.2015 14:30
<i>An approach to model the catheter deformation in virtual cardiac anatomies for simulation of intraatrial electrogram recordings</i>	Tobias Oesterlein (Karlsruher Institut für Technologie (KIT), Germany); Daniel Frisch (Institut für Biomedizinische Technik (IBT) & Karlsruher Institut für Technologie (KIT), Germany); Armin Luik and Claus Schmitt (Städtisches Klinikum Karlsruhe, Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Poster Session: Modeling	O_33	17.09.2015 14:30
<i>* Interactive visualization of cardiac anatomy and atrial excitation for medical diagnosis and research</i>	Silvio Bauer (Karlsruhe Institute of Technology, Germany); Tobias Oesterlein and Jochen Schmid (Karlsruher Institut für Technologie (KIT), Germany); Armin Luik and Claus Schmitt (Städtisches Klinikum Karlsruhe, Germany)	Track O	Cardio-vascular Modeling II	O_34	17.09.2015 16:30
<i>* Virtualizing clinical cases of atrial flutter in a fast marching simulation including conduction velocity and ablation scars</i>	Julia Trächtler (Karlsruhe Institute of Technology (KIT), Germany); Tobias Oesterlein and Axel Loewe (Karlsruher Institut für Technologie (KIT), Germany); Emanuel Poremba (Karlsruhe Institute of Technology, Germany); Armin Luik and Claus Schmitt (Städtisches Klinikum Karlsruhe, Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling II	O_35	17.09.2015 16:30
<i>Analysis of characteristic signal morphologies of double potentials near block lines in an atrial simulation model</i>	Markus Rottmann (Karlsruher Institut für Technologie (KIT), Germany); Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling II	O_36	17.09.2015 16:30
<i>* Mesh structure-independent modeling of patient-specific atrial fiber orientation</i>	Andreas Wachter (Karlsruher Institut of Technology, Germany); Axel Loewe (Karlsruher Institut für Technologie (KIT), Germany); Martin W Krueger, Olaf Doessel and Gunnar Seemann (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling II	O_37	17.09.2015 16:30



<i>* Accelerating mono-domain cardiac electrophysiology simulations using OpenCL</i>	Eike M Wülfers, Zhasur Zhamoliddinov, Gunnar Seemann and Olaf Doessel (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling II	O_38	17.09.2015 16:30
<i>* Understanding the cellular mode of action of vernakalant using a computational model: answers and new questions</i>	Axel Loewe and Yan Xu (Karlsruher Institut für Technologie (KIT), Germany); Eberhard P. Scholz (Medical University Hospital Heidelberg, Germany); Olaf Doessel and Gunnar Seemann (Karlsruhe Institute of Technology (KIT), Germany)	Track O	Cardio-vascular Modeling II	O_39	17.09.2015 16:30
<i>Upper Body Game Controller for Physically Impaired Persons based on 3D Acceleration Data</i>	Andreas Huber, Robert Koch and Erik Haßlmeyer (Fraunhofer Institute for Integrated Circuits IIS, Germany); Martin Rulsch and Christian Weigand (Fraunhofer IIS, Germany); Matthias Struck (Fraunhofer Institute for Integrated Circuits, Germany); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany)	Track P	Prevention and Rehabilitation Engineering	P_01	16.09.2015 11:15
<i>* 3D-based visual physical activity assessment of children</i>	Sebastian Maile (Ulm University of Applied Sciences, Germany); Susanne Kobel (Ulm University - Medical Centre, Germany); Michael Munz (Ulm University of Applied Sciences, Germany); Thomas Engleder (University of Applied Sciences Ulm & Laboratory for Biomechanics, Product Development and Simulation, Germany); Jürgen Steinacker (Ulm University - Medical Centre, Germany); Felix Capanni (Ulm University of Applied Sciences, Germany)	Track P	Prevention and Rehabilitation Engineering	P_02	16.09.2015 11:15
<i>A Smart Walking Aid for Visually Impaired Elderly People: Comparison of two Vibrotactile Feedback Systems</i>	Miguel Reyes Adame (Furtwangen University & Institute of Technical Medicine, Germany); Johannes Kamperschroer (University of Applied Sciences Ravensburg-Weingarten & Institute of Applied Social and Health Research, Germany); Maik Winter (Hochschule Ravensburg-Weingarten, Germany); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track P	Prevention and Rehabilitation Engineering	P_03	16.09.2015 11:15
<i>An electrical travel aid for visually impaired based on depth sensing and vibrotactile technology</i>	Jing Yu and Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track P	Prevention and Rehabilitation Engineering	P_04	16.09.2015 11:15
<i>BeMobil Research Cluster: Next steps for comprehensive mobile gait analysis with amputees</i>	Julius Thiele, Christina Schoellig, Peter Seufert and Marc Kraft (Technische Universität Berlin, Germany)	Track P	Prevention and Rehabilitation Engineering	P_05	16.09.2015 11:15

<i>* Realtime Assessment of Foot Orientation by Accelerometers and Gyroscopes</i>	Thomas Seel, David Graurock and Thomas Schauer (Technische Universität Berlin, Germany)	Track P	Prevention and Rehabilitation Engineering	P_06	16.09.2015 11:15
<i>* Image Based Reconstruction for Cystoscopy</i>	Matthias Brischwein (Fraunhofer IIS, Germany); Thomas Wittenberg (Fraunhofer Institute for Integrated Circuits IIS, Germany); Tobias Bergen (Fraunhofer IIS, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	P_07	16.09.2015 13:45
<i>Stereo Reconstruction with a 3D-Endoscope</i>	Fatih Tanriverdi and Jörg Thiem (University of Applied Sciences and Arts Dortmund, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	P_08	16.09.2015 13:45
<i>Advanced Sensing in Instruments for Minimally Invasive Surgery</i>	Simon Albrecht, Bastian Blase and Sebastian Schlegel (Technische Universität Berlin, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	P_09	16.09.2015 13:45
<i>Towards New Dexterous Motorized Instruments in Laparoscopy</i>	Bastian Blase, Sebastian Schlegel and Simon Albrecht (Technische Universität Berlin, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	P_10	16.09.2015 13:45
<i>Robotic Platform for Minimally Invasive Surgery</i>	Sebastian Schlegel, Simon Albrecht and Bastian Blase (Technische Universität Berlin, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	P_11	16.09.2015 13:45
<i>3D-Reconstruction by Polarization Imaging in Endoscopy</i>	Jan Sandvoss (Fraunhofer Institute for Integrated Circuits IIS, Germany); Arne Nowak (Fraunhofer Institute for Integrated Circuits, Germany); Thomas Wittenberg and Jürgen Ernst (Fraunhofer Institute for Integrated Circuits IIS, Germany)	Track P	Session 2 FS "Enhanced Endoscopy"	no abstract available	16.09.2015 13:45
<i>Use of hyperpolarizing pre-pulses to reduce the current density requirements during transcutaneous electrical stimulation</i>	José Luis Vargas Luna (Reykjavik University & Tecnológico de Monterrey, Iceland); Jorge Cortés Ramírez (Tecnológico de Monterrey, Mexico); Thordur Helgason (Landspítali - University Hospital, Iceland)	Track P	Poster Session: Prevention and Rehabilitation Engineering	P_13	17.09.2015 14:30
<i>Powered Active Knee-Ankle-Foot-Orthosis</i>	Juergen Hielscher, Roman Müller, Thorsten Meiss and Andreas Horn (Technische Universität Darmstadt, Germany); Julia Block and Stefan van Drongelen (Heidelberg University Clinics, Germany); Ulrich Konigorski, Helmut F. Schlaak, Peter Pott and Roland Werthschützky (Technische Universität Darmstadt, Germany)	Track P	Poster Session: Prevention and Rehabilitation Engineering	P_14	17.09.2015 14:30

<i>* Impact of Electrode Geometry on Force Generation during Functional Electrical Stimulation</i>	Jan Loitz, Aljoscha Reinert, Dietmar Schroeder and Wolfgang Krautschneider (Hamburg University of Technology, Germany)	Track P	Poster Session: Prevention and Rehabilitation Engineering	P_15	17.09.2015 14:30
<i>A system for live feedback on body postures to improve ergonomics in manufacturing processes</i>	Patrick Frenzel (HTWK Leipzig, University of Applied Sciences & Laboratory for Biosignal Processing, Germany); Franz Mätzold (University Leipzig, Germany); Mirco Fuchs and Gerold Bausch (HTWK Leipzig, University of Applied Sciences, Germany)	Track P	Poster Session: Prevention and Rehabilitation Engineering	P_16	17.09.2015 14:30
<i>An interactive app for training and qualification in differentiating blood cells</i>	Sebastian Krappe, Yesim Sahin, Thomas Bindl and Thomas Wittenberg (Fraunhofer Institute for Integrated Circuits IIS, Germany); Christian Münzenmayer (Fraunhofer IIS, Germany)	Track Q	Poster Session: Education and Training for Engineers and Physicians	Q_01	17.09.2015 14:30
<i>Novel Master Course Micromedical Engineering</i>	Volker Bucher (Hochschule Furtwangen University, Germany)	Track Q	Education and Training for Engineers and Physicians	Q_02	18.09.2015 09:15
<i>Does enhancing consciousness for strategic planning processes support the effectiveness of problem-based learning concepts in biomedical education?</i>	Viktoria Arling, Jens Knispel, Andreas Ritter and Martin Baumann (RWTH Aachen University, Germany)	Track Q	Education and Training for Engineers and Physicians	no abstract available	18.09.2015 09:15
<i>Practical testing in oral exams using e-assessment devices</i>	Mazdak Karami and Martin Baumann (RWTH Aachen University, Germany)	Track Q	Education and Training for Engineers and Physicians	no abstract available	18.09.2015 09:15
<i>* Image Guided Surgery Innovation with Graduate Students - a new lecture format</i>	Michael Friebe (Otto-von-Guericke-Universität, Germany); Jörg Traub (Technische Universität München, Germany)	Track Q	Education and Training for Engineers and Physicians	Q_05	18.09.2015 09:15
<i>Online teaching of "Regulatory Affairs" - experiences and plannings concerning a study-program</i>	Stephan Klein (Luebeck University of Applied Sciences, Germany); Heike Wachenhausen (Forum fuer Medizintechnik, Germany); Farina Steinert and Rolf Granow (FH Luebeck, Germany); Kanina Botterweck and Thorsten M. Buzug (Universität zu Lübeck, Germany)	Track Q	Education and Training for Engineers and Physicians	Q_06	18.09.2015 09:15

<i>Project-oriented learning in medical engineering education - Evaluation of a novel teaching approach</i>	Sabine Krüger-Ziolek and Zhanqi Zhao (Furtwangen University, Germany); Knut Moeller (Furtwangen University & Institute of Technical Medicine (ITeM), Germany)	Track Q	Education and Training for Engineers and Physicians	Q_07	18.09.2015 09:15
<i>* Tubular Manipulators: A new concept for intracochlear positioning of an auditory prosthesis</i>	Thomas S. Rau (Hannover Medical School, Germany); Josephine Granna (Leibniz Universität Hannover, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Omid Majdani (Hannover Medical School, Germany); Jessica Burgner-Kahrs (Leibniz Universität Hannover, Germany)	Track R	Prosthetics and Implants 1: Structures and Design	R_01	16.09.2015 16:30
<i>Vascular diameter determined by Quantitative Coronary Angiography (QCA) for optimum stent implantation regime</i>	Wolfram Schmidt (Universität Rostock, Germany); Sammy Zreik (University of Rostock, Germany); Blaz Mrevlje and Tim Rehders (Rostock University, Germany); Christoph Brandt (University of Rostock, Germany); Klaus-Peter Schmitz and Niels Grabow (Universität Rostock, Germany)	Track R	Prosthetics and Implants 1: Structures and Design	R_02	16.09.2015 16:30
<i>Dynamic Design of a Sensor-Actuator-System for a fully implantable Middle Ear Hearing Aid</i>	Martin Krause, Eric Starke and Günther Pfeifer (Technische Universität Dresden, Germany); Daniel Steinert (ETH Zürich, Switzerland); Uwe Marschner (Technische Universität Dresden, Germany); Martin Koch (Universitätsklinikum Carl Gustav Carus Dresden an der TU Dresden, Germany); Matthias Bornitz (University of Technology, Germany); Thomas Zahnert (University of Technology Dresden, Germany)	Track R	Prosthetics and Implants 1: Structures and Design	R_03	16.09.2015 16:30
<i>* Investigation of the dynamic diameter deformation of vascular stents during fatigue testing with radial loading</i>	Maria Boeck (University of Rostock, Germany); Frank Kamke (University Medical Center Rostock, Germany); Niels Grabow and Wolfram Schmidt (Universität Rostock, Germany)	Track R	Prosthetics and Implants 1: Structures and Design	R_04	16.09.2015 16:30
<i>Patient-specific Hip Prostheses designed by Surgeons</i>	Florian Coigny (University of Applied Sciences Northwestern Switzerland, Switzerland); Adrian Todor and Horatiu Rotaru (Iuliu Hatieganu University of Medicine and Pharmacy, Romania); Ralf Schumacher and Erik Schkommodau (University of Applied Sciences Northwestern Switzerland, Switzerland)	Track R	Prosthetics and Implants 1: Structures and Design	R_05	16.09.2015 16:30
<i>Retinal implants: analysis of movements in the subretinal space</i>	Walter-G. Wrobel, Udo Greppmaier and Sebastian Schleeauf (Retina Implant AG, Germany)	Track R	Prosthetics and Implants 1: Structures and Design	R_06	16.09.2015 16:30

<i>Accelerated Active Implant Degradation in Proteinated Artificial Body Fluids</i>	Friederike Benjamin, Felix Riedel and Nina Sendler (Medical School Hannover, Germany); Gerhard Pohlmann and Clemens Dasenbrock (Fraunhofer-Institut für Toxikologie und Experimentelle Medizin, Germany); Thomas Lenarz (Medizinische Hochschule Hannover, Germany); Birgit Glasmacher (Leibniz Universität Hannover, Germany); Theodor Doll (Medizinische Hochschule Hannover, Germany)	Track R	Prosthetics and Implants 2: Materials	R_07	17.09.2015 09:15
<i>Deposition of bioactive and bioinert ceramic coatings on magnesium using detonation</i>	Oleksandr Gryshkov (Leibniz Universität Hannover, Germany); Nikolai Klyui and Volodymyr Temchenko (National Academy of Sciences of Ukraine, Ukraine); Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track R	Prosthetics and Implants 2: Materials	R_08	17.09.2015 09:15
<i>* Electrospun vascular grafts with anti-kinking properties</i>	Michael Bode (Institute for Multiphase Processes & Leibniz Universitaet Hannover, Germany); Marc Müller (Gottfried Wilhelm Leibniz Universität Hannover, Germany); Holger Zernetsch and Birgit Glasmacher (Leibniz Universität Hannover, Germany)	Track R	Prosthetics and Implants 2: Materials	R_09	17.09.2015 09:15
<i>Anterior cruciate ligament prosthesis using a fiber composite approach</i>	Florian Eggert and Daniel Kaltbeitzel (RWTH Aachen University, Germany); Miguel Pishnamaz (University Hospital RWTH Aachen, Germany); Christian Hopmann (RWTH Aachen University, Germany); Hans-Christoph Pape (Orthopaedic Trauma Department, University Hospital Aachen, Germany); Thomas Gries (RWTH Aachen University, Germany); Stefan Jockenhoevel (RWTH Aachen & Helmholtz Institute for Biomedical Engineering, Germany)	Track R	Prosthetics and Implants 2: Materials	R_10	17.09.2015 09:15
<i>* Integration of temperature sensors in polyimide-based thin-film electrode arrays</i>	Maria Porto Cruz (University of Freiburg & Laboratory for Biomedical Microtechnology, Germany); Eva Fiedler (University of Freiburg, Germany); Oscar Cota (Laboratory for Biomedical Microtechnology - University of Freiburg - IMTEK, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Prosthetics and Implants 2: Materials	R_11	17.09.2015 09:15
<i>Absorbable poly(L-lactide) stent structure for regenerative percutaneous heart valve replacement - Mechanical feasibility in vitro</i>	Niels Grabow and Sylvia Pfensig (Universität Rostock, Germany); Christoph Brandt (University of Rostock, Germany); Daniela Arbeiter, Frank Luderer and Klaus-Peter Schmitz (Universität Rostock, Germany)	Track R	Prosthetics and Implants 2: Materials	R_12	17.09.2015 09:15
<i>MRI-induced heating of pacemaker electrodes - toward a realistic in vitro test model</i>	Marco Bartosch, Heiner Peters, Cornelius Klas, Christian Rackwitz, Boris Schmitt, Felix Berger and Björn Peters (Deutsches Herzzentrum Berlin, Germany)	Track R	Poster session: Prosthetics and Implants	R_13	17.09.2015 14:30

<i>* Smartphone supported upper limb prosthesis</i>	Dominik Hepp, Jan Kirsch and Felix Capanni (Ulm University of Applied Sciences, Germany)	Track R	Poster session: Prosthetics and Implants	R_14	17.09.2015 14:30
<i>* Use of quantitative tremor evaluation to enhance target selection during deep brain stimulation surgery for essential tremor</i>	Ashesh Shah (University of Applied Sciences and Arts Northwestern Switzerland, Switzerland); Jérôme Coste and Jean-Jacques Lemaire (CHU Clermont-Ferrand, Hôpital Gabriel Montpied, Clermont-Ferrand, France); Erik Schkommodau (University of Applied Sciences Northwestern Switzerland, Switzerland); Simone Hemm-Ode (University of Applied Sciences Northwestern Switzerland & School of Life Sciences, Switzerland)	Track R	Poster session: Prosthetics and Implants	R_15	17.09.2015 14:30
<i>Deformation of thin-film platinum induced by electrical stimulation</i>	Juan S. Ordonez, Linda Rudmann, Paul Cvancara, Christian Bentler and Thomas Stieglitz (University of Freiburg, Germany)	Track R	Poster session: Prosthetics and Implants	R_16	17.09.2015 14:30
<i>Evaluation of adhesion promoters for Parylene C on gold metallization</i>	Victoria Radun (Natural and Medical Sciences Institute (NMI), Germany); Rene P. von Metzen (NMI Natural and Medical Sciences Institute, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany); Volker Bucher (Hochschule Furtwangen University, Germany); Alfred Stett (NMI Naturwissenschaftliches und Medizinisches Institut, Germany)	Track R	Poster session: Prosthetics and Implants	R_17	17.09.2015 14:30
<i>Material removal mechanisms of new zirconia-based materials for medical applications</i>	Andi Wippermann and Britta Hering (Leibniz Universität Hannover, Germany)	Track R	Poster session: Prosthetics and Implants	R_18	17.09.2015 14:30
<i>Investigations for Wafer-level Integration of Thin Glass for Waveguides in Long-Term Stable Implants</i>	Marie Alt (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Poster session: Prosthetics and Implants	R_19	17.09.2015 14:30
<i>Heat treatment of photoresist to fabricate customized microlenses for implantable hermetic micropackages</i>	Linda Rudmann, Sebastian Huber and Juan S. Ordonez (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Poster session: Prosthetics and Implants	R_20	17.09.2015 14:30
<i>Analysis of Mechanical Properties of Braided Self-Expandable Airway Stents</i>	Kathrin Kurtenbach (RWTH Aachen University & Institut für Textiltechnik, Germany); Florian Eggert and Thomas Gries (RWTH Aachen University, Germany); Stefan Jockenhoevel (RWTH Aachen & Helmholtz Institute for Biomedical Engineering, Germany)	Track R	Poster session: Prosthetics and Implants	R_21	17.09.2015 14:30

<i>PDMS-based Laser-structured Optical Waveguides for Neural Probe</i>	Eva Fiedler and Frank Rehberger (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Poster session: Prosthetics and Implants	R_22	17.09.2015 14:30
<i>Surface morphology of commercial and novel experimental glaucoma drainage devices</i>	Stefan Siewert, Yasin Yassin, Wolfram Schmidt and Thomas Stahnke (Universität Rostock, Germany); Reto Allemann (Augenarzt FMH & FEBO, Zufikon, Switzerland, Germany); Rudolf Guthoff (Universität Rostock & Universitätsaugenklinik Rostock, Germany); Klaus-Peter Schmitz (Universität Rostock, Germany)	Track R	Poster session: Prosthetics and Implants	R_23	17.09.2015 14:30
<i>Concept of a bidirectional high channel count neural implant electronics using off-the-shelf components</i>	Christian Bentler and Tobias Volk (University of Freiburg, Germany); Leonhard Reindl (IMTEK - Institute for Microsystem Technology, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Poster session: Prosthetics and Implants	R_24	17.09.2015 14:30
<i>Process development for picosecond laser fabricated nerve electrode arrays for intrafascicular implantation</i>	Matthias Mueller (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany); Miguel A Ulloa (CorTec GmbH, Germany)	Track R	Poster session: Prosthetics and Implants	R_25	17.09.2015 14:30
<i>Non-hermetic implant encapsulation based on epoxy</i>	Fabian Boeser, Juan S. Ordonez and Martin Schuettler (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany); Dennis Plachta (Laboratory for Biomedical Microtechnology University of Freiburg - IMTEK, Germany)	Track R	Poster session: Prosthetics and Implants	R_26	17.09.2015 14:30
<i>* The influence of metallic ions from CoCr28Mo6 on the osteogenic differentiation and cytokine release of human osteoblasts</i>	Anika Jonitz-Heincke (University Medicine Rostock, Germany); Mark Schröder and Doris Hansmann (University of Rostock, Germany); Sandra Utzschneider (Ludwig Maximilian University, Grosshadern Medical Center Munich, Germany); Jan Philippe Kretzer (University of Heidelberg, Germany); Rainer Bader (Universität Rostock, Germany)	Track R	Poster session: Prosthetics and Implants	R_27	17.09.2015 14:30
<i>In-vivo investigation on the improvement of thin-film metallization adhesion in neural electrodes</i>	Paul Cvancara (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany); Víctor López (Universitat Autònoma de Barcelona, Spain); Xavier Navarro (Universitat Autònoma de Barcelona, Germany)	Track R	Poster session: Prosthetics and Implants	R_28	17.09.2015 14:30

<i>* Increasing the visibility of thin NITINOL vascular implants</i>	Axel Boese (Otto-von-Guericke-University Magdeburg, Germany); Georg Rose (OVGU, Germany); Michael Friebe (Otto-von-Guericke-Universität, Germany); Thomas Hoffmann and Steffen Serowy (Otto-von-Guericke University Magdeburg, Germany); Martin Skalej (Otto-von-Guericke-University Magdeburg, Germany); Werner Mailänder (Acandis GmbH & Co KG, Pforzheim, Germany); Giorgio FM Cattaneo (Acandis GmbH & Co. KG, Germany)	Track R	Poster session: Prosthetics and Implants	R_29	17.09.2015 14:30
<i>* Possible reasons for early artificial bone failure in biomechanical tests of ankle arthrodesis systems</i>	Heiner Martin (Universität Rostock, Germany); Natalia Gutteck (Martin Luther University Halle Wittenberg, Germany); Jörn-Bo Matthies (Institut für Biomedizinische Technik, Universität Rostock, Germany); Thomas Hanke (Fraunhofer IWM Halle, Germany); Georg Gradl (Hospital Harlaching, München, Germany); David Wohlrab (Martin Luther University Halle Wittenberg, Germany); Thomas Mittlmeier and Niels Grabow (Universität Rostock, Germany)	Track R	Poster session: Prosthetics and Implants	R_30	17.09.2015 14:30
<i>* Development of a Bending Test Procedure for the Characterization of Flexible ECoG Electrode Arrays</i>	Fabian Kohler (University of Freiburg & IMTEK, Germany); Rebecca Michiels and Martin Schuettler (University of Freiburg, Germany); Thomas Stieglitz (Albert-Ludwigs-Universität Freiburg & Institut für Mikrosystemtechnik, Germany)	Track R	Poster session: Prosthetics and Implants	R_31	17.09.2015 14:30
<i>Automatic detection of charge injection capacity in platinum electrodes based on the shape of the electrode potential</i>	Tomasz Moszkowski (Fraunhofer Institute for Biomedical Engineering & AGH - University of Science and Technology, Germany); Wigand Poppendieck (Fraunhofer Institute for Biomedical Engineering, Germany); Klaus-Peter Hoffmann (Fraunhofer Institute for Biomedical Engineering & IBMT, Germany)	Track R	Poster session: Prosthetics and Implants	R_32	17.09.2015 14:30
<i>Additive manufacturing for Cochlear Implants</i>	Ronny Hagemann (Laser Zentrum Hannover e. V., Germany)	Track R	Poster session: Prosthetics and Implants	R_33	17.09.2015 14:30
<i>Corrective actions concerning implants and instruments for bone surgery - Changes of product information</i>	Miriam Nowak (Federal Institute for Drugs and Medical Devices BfArM, Germany); Kathrin Lange (Federal Institute for Drugs and Medical Devices, Germany); Wolfgang Lauer (Federal Institute for Drugs and Medical Devices (BfArM), Germany)	Track S	Usability and Risk Management for Medical Devices	S_01	18.09.2015 09:15



<i>* Use Cases and Usability Challenges for Head-Mounted Displays in Healthcare</i>	Tilo Mentler, Christian Wolters and Michael Herczeg (University of Luebeck, Germany)	Track S	Usability and Risk Management for Medical Devices	S_02	18.09.2015 09:15
<i>What Happens in Postmarket Surveillance - Results of a Cross Sectional Study among German Medical Device Manufacturers</i>	Claus Zippel and Sabine Bohnet-Joschko (Witten/Herdecke University, Germany)	Track S	Usability and Risk Management for Medical Devices	S_03	18.09.2015 09:15
<i>* Device- and Service Profiles for Integrated OR Systems Based on Open Standards</i>	Alexander Mildner (UniTransferKlinik Lübeck & Institute for Software Engineering and Programming Languages, University of Lübeck, Germany); Armin Janß (RWTH Aachen University, Germany); Jasmin Dell'Anna (RWTH Aachen, Germany); Paul Merz (RWTH Aachen University, Germany); Martin Leucker (University of Lübeck, Germany); Klaus Radermacher (RWTH Aachen, Germany)	Track S	Usability and Risk Management for Medical Devices	S_04	18.09.2015 09:15
<i>* Risk Management for Medical Devices in Research Projects</i>	Christian U Sauter and Marion Heinloth (Fraunhofer IIS, Germany); Andreas Tobola (Fraunhofer Institute for Integrated Circuits IIS & Tobola Engineering, Germany); Nadine Pensky and Christian Weigand (Fraunhofer IIS, Germany)	Track S	Usability and Risk Management for Medical Devices	S_05	18.09.2015 09:15
<i>Autoimmune blistering dermatoses</i>	Enno Schmidt (Universität Lübeck, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	no abstract available	16.09.2015 09:15
<i>Development of specific adsorbers for therapeutic immunoapheresis in pemphigus and bullous pemphigoid</i>	Jana Langenhan and Michael Mersmann (Euroimmun AG, Germany); Jenny Dworschak and Enno Schmidt (Universität Lübeck, Germany); Christian Probst and Winfried Stöcker (Euroimmun AG, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	Z_FS02	16.09.2015 09:15

<i>Automated direct immunofluorescence microscopy in dermatology: EUROTide technology increases sensitivity and staining quality</i>	Susanne Lemcke (University of Lübeck, Germany); Siegmund Sokolowski, Nicole Rieckhoff and Michael Buschtez (Euroimmun AG, Germany); Antje Winter-Keil (University of Lübeck, Germany); Christine Schaller, Norbert Rottmann and Winfried Stöcker (Euroimmun AG, Germany); Detlef Zillikens (University of Lübeck, Germany); Enno Schmidt (Universität Lübeck, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	Z_FS03	16.09.2015 09:15
<i>The Biochip® mosaic technology as valuable tool in the routine diagnosis of autoimmune blistering dermatoses</i>	Ingolf Karl (University of Luebeck & Luebeck Institute for Experimental Dermatology, Germany); Nina van Beek (University of Luebeck, Germany); Kristin Rentzsch, Bianca Teegen, Christian Probst and Lars Komorowski (Euroimmun AG, Germany); Michael Kasperkiewicz (University of Luebeck & Luebeck Institute for Experimental Dermatology, Germany); Kai Fechner and Inga M. Dettmann (Euroimmun AG, Germany); Detlef Zillikens (University of Lübeck, Germany); Winfried Stöcker (Euroimmun AG, Germany); Enno Schmidt (Universität Lübeck, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	Z_FS04	16.09.2015 09:15
<i>Multivariant profile ELISA for sensitive and specific one-step diagnostics of autoimmune bullous dermatoses</i>	Cornelia Dährnich (EUROIMMUN, Germany); Nina van Beek (University of Luebeck, Germany); Nora Hornig (EUROIMMUN, Germany); Stephanie Goletz and Jenny Dworschak (University of Lübeck, Germany); Wolfgang Schlumberger (EUROIMMUN, Germany); Detlef Zillikens (University of Lübeck, Germany); Enno Schmidt (Universität Lübeck, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	Z_FS05	16.09.2015 09:15
<i>IgE reactivity against the NC16A domain of BP180 in bullous pemphigoid: influence of total IgE serum levels</i>	Nina van Beek (University of Luebeck, Germany); Nadine Schwemm, Franziska Schulze, Andreas Recke and Detlef Zillikens (University of Lübeck, Germany); Enno Schmidt (Universität Lübeck, Germany)	Track Z (FS)	FS: Novel developments in the diagnosis and treatment of autoimmune blistering diseases	Z_FS06	16.09.2015 09:15
<i>Football 4.0 - Increased training efficiency by using high tech</i>	Matthias Lochmann, Holger Eckhardt and F Bodem (University of Erlangen-Nuremberg, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS07	16.09.2015 11:15
<i>Wearable computing systems for recreational and elite sports</i>	Bjoern M Eskofier (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS08	16.09.2015 11:15

<i>The 'Leistungszentrum Elektroniksysteme (LZE)' - contents and aims of the project 'Low Power Electronic Systems for Wearable Technologies in Sports and Fitness'</i>	Matthias Struck (Fraunhofer Institute for Integrated Circuits, Germany); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany); Nadine Lang and Christian Weigand (Fraunhofer IIS, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS09	16.09.2015 11:15
<i>ambiotex Shirt</i>	Klaus Bscheid (Ambiotex GmbH, Germany); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany); Thomas Claussen and Anastasija Brandt (Ambiotex GmbH, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS10	16.09.2015 11:15
<i>Heart rate variability extraction based on mobile monitored, single-channel ECG data with focus on sports applications</i>	Nadine Lang (Fraunhofer IIS, Germany); Daniel Tantinger (Fraunhofer Institute for Integrated Circuits IIS, Germany); Alexander Duda and Christian Weigand (Fraunhofer IIS, Germany); Matthias Struck (Fraunhofer Institute for Integrated Circuits, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS11	16.09.2015 11:15
<i>Textile-integrated elastic Sensor for Foot Pressure Measurement</i>	Johannes Ziegler (Fraunhofer Institute for Silicate Research ISC, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS12	16.09.2015 11:15
<i>ULPSEK - Ultra-Low-Power Sensor Evaluation Kit</i>	Andreas Tobola (Fraunhofer Institute for Integrated Circuits IIS & Tobola Engineering, Germany); Ruslan Rybalko (Fraunhofer-Institute for Integrated Circuits, Germany); Korpok Oliver, Franz Streit and Chris Espig (Fraunhofer Institute for Integrated Circuits IIS, Germany); Christian Hofmann (Fraunhofer-Institut für Integrierte Schaltungen, Germany); Nadine Lang (Fraunhofer IIS, Germany); Matthias Struck (Fraunhofer Institute for Integrated Circuits, Germany); Christian Weigand (Fraunhofer IIS, Germany); Georg Fischer (University of Erlangen-Nuremberg, Germany)	Track Z (FS)	FS: Wearable Sensors	Z_FS13	16.09.2015 11:15
<i>Standardisation for Plug and Play of Medical Devices</i>	Johannes Dehm (VDE Verband der Elektrotechnik Elektronik Informationstechnik e. V., Germany); Heike Moser (DIN Deutsches Institut für Normung e. V., Germany); Björn Andersen (Universität zu Lübeck, Germany)	Track Z (FS)	FS: Open, secure, and dynamic networking in clinical environments	Z_FS14	18.09.2015 11:15

<i>An architecture for distributed systems of medical devices in high acuity environments</i>	Stefan Schlichting (Drägerwerk AG & Co. KGaA, Germany); Stephan Pöhlisen and David Gregorczyk (Dräger Medical GmbH, Germany)	Track Z (FS)	FS: Open, secure, and dynamic networking in clinical environments	Z_FS15	18.09.2015 11:15
<i>Regulatory approval route and strategy for open networked medical devices</i>	Peter Knipp (qcmcd GmbH, Germany); Armin Janß (RWTH Aachen University, Germany)	Track Z (FS)	FS: Open, secure, and dynamic networking in clinical environments	Z_FS16	18.09.2015 11:15
<i>Application of Medical Device User Interface Profiles for Human-Risk Analysis of Open Integrated OR Systems</i>	Armin Janß and Paul Merz (RWTH Aachen University, Germany); Jasmin Dell'Anna and Klaus Radermacher (RWTH Aachen, Germany)	Track Z (FS)	FS: Open, secure, and dynamic networking in clinical environments	Z_FS17	18.09.2015 11:15
<i>Opportunities and challenges of open networking in clinical environments</i>	Stefan Fischer (University of Lübeck, Germany); Timm Bußhaus (University of Luebeck, Germany); Franziska Kühn and Martin Leucker (University of Lübeck, Germany); Alexander Mildner (UniTransferKlinik Lübeck & Institute for Software Engineering and Programming Languages, University of Lübeck, Germany); Malte Schmitz (University of Lübeck, Germany)	Track Z (FS)	FS: Open, secure, and dynamic networking in clinical environments	Z_FS18	18.09.2015 11:15