



## Scientific Program

Wednesday March 09, 2016

09:00	Registrierung		
10:00	Begrüßung		
<b>Block 1</b>			
10:20	01	P. A. Behringer	SliceTracker: An open-source platform for prostate motion tracking during in-bore targeted MRI-guided biopsy
10:22	02	M. Schmiedel	Design of a Motion Phantom for Magnetic Resonance Imaging
10:24	03	E. Franke	Parallelization of Motion Correction Algorithms for Multi-Band fMRI Data
10:26	04	K. Kreft	Phase-Based Motion Processing
10:28	05	I.Y. Ha	Model-based Respiratory Motion Compensation in MRI-guided Radiotherapy
10:30	06	J. Mrongowius	Tikhonov regularization scheme for image reconstruction in the presence of model errors
10:32	07	C. Kowalski	Reconstruction of Connected Structures in Magnetic Particle Imaging using Markov Random Field based Regularization
10:34	08	P. Weissert	Comparing Different Compressed Sensing Reconstruction Techniques for the System Matrix in Single-Sided MPI
10:36	09	Y. Blancke Soares	Comparison of Frequency Selection Methods for Image Reconstruction in Magnetic Particle Imaging – Improving Image Quality –
10:38	10	S. Löw	Detection of Non-rigid Motion, while Conducting a Static 3D Scene Reconstruction in Realtime
10:40	11	T. Langner	Using Convolutional Neural Networks for Cut Line Detection in Medical Images
10:42	12	J. Kroß	Denoising spectral CT images using parallel level sets
10:44	13	I. M. Baltruschat	Automatic Orientation Detection of Hand Structures in Digital X-Ray Images
10:46	14	I. Nehrhoff	Image processing of pulmonary radiography of pediatric patients to assess tuberculosis or pneumonia for the application in diagnosis in low- and middle-income countries
10:48	15	L. Landwehr	Myocardial Strain Measurement – A Registrational Method with Block Matching Approach –
10:50	Unternehmenspräsentation Dräger		
11:10	Beiträge 01-15 am Poster		
11:30	Coffee Break		
<b>Block 2</b>			
11:42	16	M. Schumacher	Evaluation of medical image registration algorithms on pulmonary inhale and exhale CT scans
11:44	17	K. Kläser	A PET/MR Rat Brain Atlas for Automated Time Activity Curve Extraction
11:46	18	M. Grehn	3D printed NEMA NU 4-2008 phantom for small animal PET: a comparison study using different modalities
11:48	19	R. Schäfer	GATE based Monte Carlo Simulation of Planar Scintigraphy using the XCAT Phantom
11:50	20	S. Bruns	Sensitivity of Magnetic Particle Imaging Compared with 19F Magnetic Resonance Imaging – Preliminary MPI Results –
11:52	21	F. Matysiak	Phantom Design for a High Resolution Field Free Line MPI Scanner
11:54	22	A. Kleinfeld	Investigation of the suitability of a commercial 3D camera for observation of the surgical field
11:56	23	M. Wattenberg	Impact of Different Breathing Analysis Techniques on Body-surface Indexed Respiratory-Related Stroke Volumes
11:58	24	E. Mücke	Acquisition of respiratory signals and generation of visual realtime biofeedback using structured IR light surface scanning
12:00	25	N. Eckardt	Movement identification based on exoskeleton sensor data for event marking of the electroencephalogram
12:02	26	P. Bedei	Detection of Joint Diseases in Horses through Classification of Vibroarthrography Signals using Mel Frequency Cepstral Coefficients
12:04	27	J. Beuke	Identifying an Oxygenation Model from FiO2-SpO2 Relations in Ventilated Patients
12:06	28	S. Holtorf	Memory Performance of Spiking Neural Networks – How to Store and Retrieve Information –
12:08	29	D. Rehmann	Device Metric processing with FHIR – from device observation report to device metrics bundle –
12:10	30	M. Rhein	Converting HL7v2.6 to FHIR – One method on how to perform it –
12:15	Unternehmenspräsentation Stryker		
12:35	Beiträge 16-30 am Poster		
12:55	Mittagspause		
13:40	Gruppenfoto		
13:55	Unternehmenspräsentation Yxon		



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Block 3			
14:15	31	S. Heusel	Test Automation Framework for an HL7 integration engine
14:17	32	M. Lewke	Adaptation to a prototype system for the bidirectional communication in the MRI environment on clinical issues
14:19	33	P. Flesch	Determining the proportionality of the right and left pupil distance using the video centration system and establishing a measuring method with high accuracy and high reproducibility for determining the pupil distance (PD)
14:21	34	Q. Kelmendi	Creation of a new test method and a validation strategy for the visual inspection of LDPE-bags
14:23	35	A. Boy	Qualification of a new Cutplotter for ULTRAPRO COMFORT PLUG™
14:25	36	A. Riebesel	Completion of a Test Bench to Verify the Peel Adhesion of Medical Devices: Software Development and Validation
14:27	37	K. Steppke	Determination of action forces applied by users – To make a medical device more reliable –
14:29	38	L. Davenport	Optimization and Evaluation of a Positive End-Expiratory Pressure Valve for Dräger Anesthesia Machines
14:31	39	B. Al-Tashi	Validation of non-invasive, neonatal blood pressure cuffs
14:33	40	M. Apostel	Development of a Test Facility for non-invasive Ventilation Equipment
14:35	41	J. Beer	Characterisation, installation and functional testing of a collimator at a research linear accelerator
14:37	42	M. Al Msalma	Design and development of a steering platform for an innovative infusion system
14:39	43	H. Köhler	Setup for Estimation of Absolute Subcutaneous Water Content by Noninvasive Spatial Resolved Diffuse Reflectance Measurement
14:41	44	N. Tobies	Micro alignment of optical components – A comparative study about adhesives –
14:43	45	K. Hering	Inkjet printing of surfactants, proteins and enzymes for biomedical applications
14:45	Unternehmenspräsentation Olympus		
15:05	Beiträge 31-45 am Poster		
15:25	Coffee Break		
Block 4			
15:35	46	K. C. Reiter	Improving the optical properties of a fused silica capillary
15:37	47	H. Quardokus	Evaluation of molecular dynamics calculations for the determination of diffusion coefficients
15:39	48	K. Duda	Construction of a Cryo Microscope for Single-molecule Measurements
15:41	49	C. Grill	Method Optimisation and Preparation for Nanoparticle Induced Hyperthermia as a Novel Therapy to Treat Cutaneous Leishmaniasis
15:43	50	R. Gänger	Lactate separation employing electrophoresis – Separation of blood components in an electric field –
15:45	51	A. Kluge	The UV-visible absorption spectrum of all-trans retinal chromophore in the gas phase
15:47	52	P. Olenik	Simulation of UV Absorption of the Toxic Gas Hydrogen Sulfide
15:49	53	I. Kuschnerus	Sensitivity Characterization of an Epifluorescent Microscope for Tracking of Photoluminescent Nanoparticles in Chick Embryo
15:51	54	S. Lohmann	Development And Simulation Of An Optical Coherence Tomography Catheter For Early Screening Of Colorectal Cancer
15:53	55	M. Casper	Imaging cold-induced vasodynamic behaviour using optical coherence tomography for microangiography
15:55	56	L. Effe	Ex-vivo validation of a new speckle-based retinal photocoagulation control
15:57	57	H. Hakert	Fiber based ytterbium amplified nanosecond pulses for 2-Photon- and stimulated Raman scattering microscopy
15:59	58	T. Schmidtke	Multi-pump diode arrangement of a diode-pumped solid state laser
16:01	59	D. Weng	A graphical user interface-based automatized analysis routine for the intracellular luminescence nanothermometry
16:05	Unternehmenspräsentation Senspec		
16:25	Beiträge 46-59 am Poster		
16:45	Projektpräsentation Fachbereich Bauwesen, Architektur zur Konzeptionierung einer Kinderklinik A. L. Steensbeck, J. Karstens, S. Wehrig		
16:55	Get-together		