ICCAS

INNOVATION CENTER COMPUTER ASSISTED SURGERY

HIGHLIGHTS LEIPZIG October 26-27 2017 Ath European symposium on focused ultrasound therapy www.eufus.org

Welcome to EUFUS 2017 & Pre-Conference Workshop Experimental FUS and HIFU!

October 25 – 27, 2017 | Leipzig – We cordially invite you to join the EUFUS 2017, taking place at Salles de Pologne in Leipzig, October 26-27, 2017. You may expect clinical results of FUS and HiFU as well as novel promising applications presented by prestigious speakers from the leading European centers, speed scientific presentations and invited lectures on areas of topical interest to this field and poster sessions. The main symposium is augmented by its Pre-Conference Workshop FUS research & technology which will start October 25, 2017 at ICCAS. The Pre-Conference Workshop is supported by the Federal Ministry of Education and Research (BMBF) project SONO-RAY of ICCAS and OncoRay (Dresden). The European Accreditation Council for Continuing Medical Education (EACCME®) has been granted 17 European CME credits (ECMEC®s) for EUFUS 2017 and its Pre-Conference and the Sächsische Landesärztekammer (SLÄK) has been granted 21 CME credits for EUFUS 2017. We are looking forward to seeing you in Leipzig!



Tutors and international participants of DORS 2017 at ICCAS

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DORS 2017 Successfully Completed

August 28 – September 1, 2017 | Leipzig – ICCAS's Digital Operating Room Summer School (DORS) successfully ended in early September. The feedback of the 26 participants and their tutors from more than 12 different countries was very positive due to the well balanced combination of theoretical knowledge transfer, OR-visits and practical units. Leading physicians of Leipzig University Hospital and Heart Center Leipzig as well as foreign experts supported the extensive summer school program, certified with 38 European CME-Credits (EACCME®). The course contents included computer assisted applications in the fields of ENT-, Neuro-, Visceral- and Heart-surgery, Urology and Radiology, the Digital Patient Model, medical robotics and technologies for the future operating room. The next DORS is scheduled from August 27 – 31, 2018.

ICCAS and innoFSPEC on Collaboration Course

July 2017 | Potsdam – In July 2017, a workshop at the Leibniz Institute for Astrophysics in Potsdam was held, which explored possible cooperation potentials of the two Centers of Innovation Competence 'Innovative Fiberoptic Spectroscopy and Sensing' and 'Computer Assisted Surgery'. The center's core areas Astrophysics and Spectroscopy as well as Modeling and Digitalization in Medicine serve as a basis for the creation of joint technologies. The workshop generated a strong interest in the development of common projects.



ZIK ICCAS meets ZIK innoFSPEC scientists in Potsdam for possible collaboration.

Project IMPACT – 1st Status Meeting

August 2017 | Leipzig – At the end of August, the first status meeting of the joint project IMPACT - Mobile System for Emergency Medical Diagnosis and Monitoring of the Pneumothorax was held. Representatives of the project partners: Fritz Stephan GmbH, ITP GmbH, the Faculty of Electrical Engineering and Information Technology of Leipzig University of Applied Sciences and the project management VDI Technologiezentrum GmbH met at ICCAS to discuss previous achievements such as the ongoing requirement analysis and preparatory works on technical work packages and next work steps, including the completion of a first prototype for experimental measurements.



Participants of 1st status meeting of research project IMPACT.

EU MFH - Workshop in Israel

September 2017 | Tel Aviv – In the beginning of September, Prof Thomas Neumuth visited the field hospital of the Israeli defence forces among an international observation team. The visit took place within the scope of a military exercise in the North of Israel. Under discussion were best practice standards for mechanisms of disaster assistance. It was followed by a workshop on evacuation strategies for hospitals at the Galiee Medical Center in Naharija, including the visit of a 600-bed underground hospital.



Prof. Neumuth visited the field hospital of the Israeli defence forces among an international observation team. © Prof. Thomas Neumuth

RESEARCH & SCIENCES

DPM - Visualization Work Published

August 21, 2017 | Leipzig – Scientists from the DPM-group published first research results on the visualization of the Digital Patient Model. The visualization work was developed in close collaboration with the Gesellschaft für Technische Visualistik mbH (GTV), Dresden and the ENT-Clinic of Leipzig University Hospital. Physicians can efficiently verify tumor classifications before being transferred to the ENTtumor board by means of the prototype developed in this works. This will be an important basis for computational therapy decision support.

Link to the paper 'Visual Verification of Cancer Staging for Therapy Decision Support'

PAST EVENTS

DPM-Tutorial at Medinfo-Congress

August 21, 2017 | Hangzhou, China – Within the framework of the MedInfo world congress in Hangzhou (China) the research group Digital Patient- and Process Model gave a tutorial on 'Model-Based Therapeutic Decision Support'. Probabilistic and mechanistic models as well as their integration were presented in the contexts of laryngeal cancer treatment and cerebral aneurysm management. The tutorial was very well attended reflecting the high interest in model-based clinical decision support.



DPM research group with a tutorial at Medinfo-Congress.

8th Summer School Surgical Robotics

September 6 – 13, 2017 | Montpellier, France – Prof. Andreas Melzer was co-organizer and tutor of the Image Guided Therapies (IGT) – Workshop. The session dealt with the topic 'Ultrasound and MR guided Focused Ultrasound Therapy : SONO-RAY'. The workshop brought together researchers in simulation and modelling, imaging and sensing, computing, robotics as well as visualization to improve the localization and targeting of pathological tissue with surgical instruments and focused energy delivery.

Prof. Melzer visited National Cancer Center (NCC) in South Korea

September 2017 | Goyang-si, South Korea



Special Session at BMT 2017

September 10 - 13, 2017 | Dresden – At this year's Conference of the Societies of Biomedical Engineering (BMT) and Medical Physics ICCAS scientists from the research areas Model-based Automation and Integration and Digital Patient- and Process Model were represented in an own session on model based therapy. Furthermore, there were contributions on 'Hyperspectral Imaging' and 'Combined PET-MR-guided focused ultrasound with radiation therapy' of the research project SONO-RAY. This event took place at the International Congress Center Dresden.

UPCOMING EVENTS

Prof. Neumuth talks about Robots at Children's University Leipzig

October 20, 2017 | 5.00 pm | Audimax, Campus Augustusplatz, Leipzig University

Eventlink

Research for the Future at MEDICA 2017

November 13 – 16, 2017 | Düsseldorf – Visit the ICCAS-booth 'RoboDirect – 3D Model-Based, Ultrasound-Guided Directing Assistant for Needle Advancement' at the common booth of IHK Leipzig with KUKA Robots funded by the Saxon State Minstry of Science and Art.

Registration & Infos

ICCAS & SONO-RAY Status Meeting 2017 | Save the Date!

January 18, 2018 | Leipzig – A review of ICCAS's activities in 2017, SONO-RAY status meeting, reports of all research groups, presentations of research highlights, and a meeting of the advisory board.

VACANCIES

Research Assistant (SHK)	
to support research area "therapy of pituitary tumor"	
	Offer
Research Associate (PostDoc)	
for research project "Digital Patient Model"	
	Offer
Bachelor- and Master Thesis	
in "Computer-assisted Surgery"	
	Offer



ZENTREN FÜR INNOVATIONSKOMPETENZ UNTERNEHMEN

REGION



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