IPCAI 2011
IPCAI 2011, the 2nd International Conference on Information Processing in Computer-Assisted Interventions, will be held on June 22 in Berlin, Germany (co-located with CARS). Based on a highly selective double anonymous review process, IPCAI is aiming at organizing an event in which the best conference articles in computer assisted interventions are reviewed, selected, presented, and actively discussed.

Venue
IPCAI 2011 will be co-located with CARS 2011 at the Estrel Convention Center in Berlin, Germany.

Executive Committee
› Nassir Navab, CAMP/TU Munich, Germany
› Russell Taylor, JHU, USA
› Guang-Zhong Yang, Imperial College, UK
› Kensaku Mori, Nagoya University, Japan
› Pierre Jannin, INRIA/INSERM, Rennes, France and MNI-McGill, Montreal, Canada
› Leo Joskowicz, Hebrew University, Israel

Organization
› Stefanie Demirci, CAMP/TU Munich, Germany
› Martin Horn, CAMP/TU Munich, Germany
Program

8:30-8:40  Opening statements

Session 1  8:40-9:05  First set of short 5 minutes presentations
- The Tumor Therapy Manager – Design, Refinement and Clinical Impact of a Software Product for ENT Surgery Planning and Documentation  
  Ivo Rössling, Lars Dornheim, Bernhard Freim, Andreas Boehm
- An image-guided surgery system to aid endovascular treatment of complex aortic aneurysms: description and initial clinical experience  
  Gesine Peinem, Andreas Varnas, Neville Dastur, Tom Carrell
- OR Specific Domain Model for Usability Evaluations of Intra-Operative Systems  
  Ali Bigdelou, Tobias Sterner, Stefan Wiesner, Florian Matthies, Nasir Navab
- A Multi-view Active Contour Method for Bone Cement Reconstruction from C-Arm X-Ray Images  
  Blake Lucas, Yoshito Otake, Meinrad Armand, Russell Taylor
- Biomechanically Constrained Groupwise Statistical Shape Model to Ultrasound Registration of the Lumbar Spine  
  Saiavsh Khallaghi, Parvin Mousavi, Dan Borschneck, Garbor Fichtinger, Parang Abolmaesumi

9:05-9:40  First Oral Session
- Visual tracking of surgical tools for collision detection in retinal surgery  
  Rogerio Recha, Marcin Balicki, Eric Meisner, Raphael Sznitman, Russell Taylor, Gregory Hager

9:40-10:00  Coffee Break

Session 2  10:00-10:20  Second set of short 5 minutes presentations
- DOF Minimization for Optimized Shape Control under Active Constraints for a Hyper-redundant Flexible Robot  
  Valentina Velato, Ka-Wai Kwok, Guang-Zhong Yang
- A Robotic System for Intra-operative Trans-rectal Ultrasound and Ultrasound Elastography in Radical Prostatectomy  
  Troy Adebode, Sepehri Saidi, Sara Mahdavi, Mehdi Moradi, Christopher Nguyen, Larry Goldenberg
- Hand-Held Force Magnier for Surgical Instruments  
  George Shehadi, Iain Wu, Roberta Klatzky, John Daley, Mel Siegal, Randy Lee, Ralph Holts
- PS-GANS: A Patient-Specific, Gravity Assisted Navigation System for Acetabular Cup Placement  
  Guoxian Zheng, Santiago Echeverri, Weiguo Xie, Lutz-P. Nolte

10:20-12:00  Second Oral Session
- Correlating clinical scores with anatomical electrodes locations for assessing deep brain stimulation  
  Martin Lally, Claire McIvor, Alexandre Abadie, Pierre Jamin
- Intra-operative “Pick-up” Ultrasound for Robot Assisted Surgery with Vessel Extraction and Registration: A Feasibility Study  
  Carter Schneide, Julian Grossman, Christopher Nguyen, Robert Rohling, Sepehri Saidi

12:00-12:30  Lunch

Session 3  12:30-13:45  Poster Discussion Session

13:45-15:30  Third Oral Session
- Constrained 2-D/3-D Registration for Motion Compensation in AFib Ablation Procedures  
  Alexander Brost, Andreas Wimmer, Rui Liu, Joachim Hornegger, Norbert Strobel
- Image-Based Automatic Ablation Point Tagging System with Motion Correction for Cardiac Ablation Procedures  
  Yinglang Ma, Gang Gao, geert Gijbers, Albo Rinaldi, Jaswinder Gill, Raza Raza, Kavish Rode
- Soft Tissue Surface Tracking for Open Liver Surgery Using Passive Single Markers  
  Thia Oliveira-Santos, Matthias Peterhans, Simon Hofmann, Stefan Weber

15:30-15:45  Coffee Break

Session 5  15:45-17:00  Fourth Oral Session
- Improved Neuronavigation through Integration of Intraoperative Anatomical and Diffusion Images in an Interventional MRI Suite  
  Pankaj Daga, Gavin Winston, Marc Mordat, M. Jorge Cardoso, Mark White, Andrew W. McEvoy, John Thornton, David Hawkes, John Brunet, Sebastian Duriez
- Panorama Ultrasound for Guiding Epidural Anesthesia: A Feasibility Study  
  Hedyah Rafii-Tari, Purang Abolmaesumi, Robert Rohling

17:00-17:30  Plenary Discussion  
Presentation of Awards

Wednesday, June 22  
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