Programme GSB Summer School 2019

Monday, the 1st of July 2019

10.30 h
Introduction GSB/GRK2274
Prof. Dr. Axel Haase, Prof. Dr. Katia Parodi

11.00 h
Robotic Imaging, Machine Learning and Augmented Reality for Computer Assisted Interventions
Prof. Dr. Nassir Navab
CAMP - Computer Aided Medical Procedures & Augmented Reality, TUM
http://campar.in.tum.de/WebHome

11.45 h
Innovative image-guidance solutions for ion beam therapy
Prof. Dr. Katia Parodi
Chair of Experimental Physics, Medical Physics, LMU
https://www.med.physik.uni-muenchen.de/index.html

13.00 h Lunch

14.30 h
Career planning in industry
Dr. Timo Schirmer
Manager, MR Applied Science Laboratory Europe GE Healthcare
http://www.ge.com/research

15.15 h
Quantitative multiparametric MRI – a rich picture
PD Dr. Marion Menzel
GE Healthcare
http://www.ge.com/research

16.00 h Poster Session/Coffee

17.30 h
The MADPET story: Physics, engineering, and computer science for improved molecular imaging
Prof. Dr. Sibylle Ziegler
Laboratory for Preclinical Imaging, Department of Nuclear Medicine
Klinikum der Universität München, LMU
http://www.klinikum.uni-muenchen.de/Klinik-und-Poliklinik-fuer-Nuklearmedizin/de/preclinical_imaging/index.html
18.15 h
*Meet the Expert Session*
(Informal opportunity to ask the speakers of the day all kinds of questions)

**Tuesday, the 2nd of July 2019**

9.00 h
*Nuclear Theranostics*
Prof. Dr. Wolfgang Weber
Nuklearmedizin, Klinikum rechts der Isar, TUM
[http://www.nuk.mri.tum.de/klinikleitung](http://www.nuk.mri.tum.de/klinikleitung)

9.45 h
*Computational models of cellular decision making*
Dr. Carsten Marr
Group Leader Single Cell Dynamics, Deputy Head of Institute in the Institute of Computational Biology, Helmholtz-Zentrum München
[https://www.helmholtz-muenchen.de/icb/institute/staff/staff/ma/2485/Dr.-Marr/index.html](https://www.helmholtz-muenchen.de/icb/institute/staff/staff/ma/2485/Dr.-Marr/index.html)

10.15 h *Poster Session/Coffee*

12.00 h
*Excursion to the company Brainlab*

**Wednesday, the 3rd of July 2019**

9.00 h
*Good Scientific Practice Course*

13.00 h *Lunch*

14.30 h
*Wave-Optical X-ray Imaging for Improved X-ray Diagnostics*
Prof. Dr. Franz Pfeiffer
Munich School of BioEngineering, Chair of Biomedical Physics, TUM

15.15 h
*Quantitative magnetic resonance imaging and spectroscopy of lipids*
Dominik Weidlich
Body Magnetic Resonance Research Group, Klinikum rechts der Isar, TUM
[http://bmrrgroup.de](http://bmrrgroup.de)

16.00 h *Coffee Break*
16.45 h  
*On vessels and networks*  
Prof. Dr. Björn Menze  
Munich School of BioEngineering, Chair for Computer Aided Medical Procedures & Augmented Reality, TUM  
[http://home.in.tum.de/~menze](http://home.in.tum.de/~menze)

17.30 h  
*Computer Assisted Ophthalmic Interventions*  
Dr.-Ing. Ali Nasseri  
Robotics and Embedded Systems, Augenklinik und Poliklinik, Klinikum rechts der Isar, TUM  
[http://www.augenklinik.med.tum.de/node/215](http://www.augenklinik.med.tum.de/node/215)

18.15 h  
*Digitalization of Orthopaedic Rehabilitation, from concept to realization*  
Dr. Alejandro Mendoza García  
reFit Systems GmbH  
[https://www.refit-systems.com](https://www.refit-systems.com)

19.00 h  
*Concluding Remarks/Poster Price*