

Program – BIOQIC Days 2019

**NH Hotel Berlin Potsdam Conference Center, Zehlendorfer Damm 190,
Kleinmachnow**

Thursday 19/09/2019

8:00 Pickup by bus (Berlin Mobil) from bus stop Charité Campus Mitte at Luisenstraße (close to bookshop Lehmanns):



8:45 Arrival and registration at NH Hotel Berlin Potsdam Conference Center

Scientific program

9:00-9:15	Welcome and introduction		
PhD student talks – Radiodiagnostics/ Contrast agents Chair: Sebastian Dietrich, Co-chair: Jean Pierre Bassenge			
Time	Name	PI's	Project title
09:15-09:30	Patric Werner	Schröder Rademann Taupitz	Transchelation of Gadolinium with GAGs as Extracellular Matrix Component: Investigating the Quantitative Progress by Time-Resolved T1 Relaxometry
09:30-09:45	Azadeh Mohtashamdo-latshahi	Taupitz/ Schnorr Schäffter Käs	Evaluation of Nanoparticle Medium/Matrix interactions for Magnetic Particle imaging

09:45-10:00	Yavuz Oguz Uca	Taupitz Schröder Ludwig	Distribution of Gadolinium and Iron-Oxide based Contrast Agents for Magnetic Resonance Imaging in Atherosclerotic Plaques Revealed by Elemental Microscopy
10:00-10:15	Anna Grunwald	Abram Brenner Buchert	The Kläui Ligand as a Bifunctional Chelator for Nuclear Imaging
10:15-10:45	Coffee break		
PhD student talks – Neural Networks			
Chair: Felix Schrank, Co-chair: Ledia Lilaj			
Time	Name	PI's	Project title
10:45-11:00	Stephan Wäldchen	Kutyniok Sack Hege	The Computational Complexity of Understanding Network Decisions
11:00-11:15	Jan Macdonald	Kutyniok Schäffter Schulz- Menger	Rate-Distortion Explanations for ReLU Neural Networks
11:15-11:30	Andreas Kofler	Dewey Haltmeier Kachelrieß	Neural Networks-based Regularization for Inverse Problems in Medical Imaging
11:30-11:45	Nader Aldoj	Dewey Stober Schäffter	Automatic prostate and prostate zones segmentation of magnetic resonance images using convolutional neural networks
11:45-13:00	Lunch (Restaurant)		
13:00-15:00	Debate Training – Part I		
15:00-15:30	Coffee break		
15:30-17:30	Debate Training – Part II		
18:00-19:00	Dinner (Restaurant)		
19:00-20:00	After dinner talk by emeritus Prof. Ulrich Speck (Bar)		
20:00-21:00	Drinks under musical accompaniment of the band "Roy Wilde & Golda Heart" (Bar)		

Friday 20/09/2019

9:00-9:15	Welcome and introduction		
PhD student talks – Motion correction/ 3D Imaging			
Chair: Azadeh Mohtashamdolatshahi, Co-chair: Yavuz Oguz Uca			
Time	Name	PI's	Project title
09:15-09:30	Sebastian Dietrich	Schäffter Schulz- Menger Niendorf	3D Radial Phase Encoded Flip Angle Imaging at Ultra-High Field Strength to Improve Image Quality of 3D Thorax Imaging
09:30-09:45	Johannes Mayer	Schäffter/ Kolbitsch Makowski Brenner	3D Non-rigid cardiac and respiratory motion correction of cardiac PET-MR
09:45-10:00	Matteo Ippoliti	Makowski Kolbitsch Brenner	3D non-rigid motion-corrected dynamic contrast enhanced MRI of the liver with 1.5 mm ³ isotropic resolution
10:00-10:15	Jean Pierre Bassenge	Schmitter Schulz- Menger Kolbitsch	An incoherent radial phase encode trajectory for 4D flow MRI with Compressed Sensing

10:15-10:45	Coffee break		
PhD student talks – MRE			
Chair: Stephan Wäldchen, Co-chair: Andreas Kofler			
Time	Name	PI's	Project title
10:45-11:00	Felix Schrank	Sack Schulz- Menger Ittermann	Real-time magnetic resonance elastography of lower leg muscles during dynamic exercises
11:00-11:15	Gergely Bertalan	Sack Braun Fischer	High-resolution multifrequency MRE at high field strengths
11:15-11:30	Ledia Lilaj	Sack Fischer Hirsch	Biological tissue as a biphasic porous medium: a structural and mechanical investigation through inversion recovery MR imaging and MR elastography
11:30-12:30	Discussion and feedback		
12:30-13:30	Lunch (Restaurant)		
14:00-17:00	Guided bike tour – depart from the hotel		
17:00	Leave to Berlin (by S Bahn)		