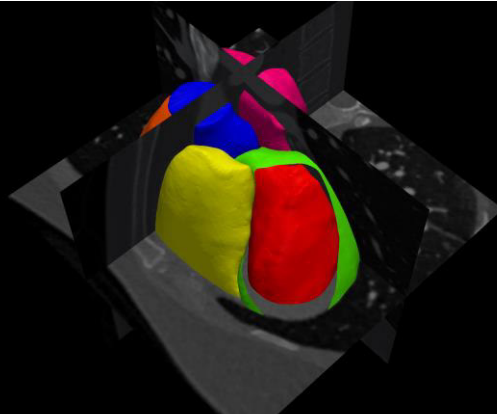
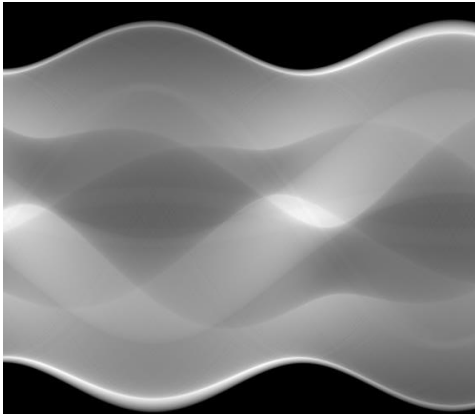


26th International SAOT Workshop on Computed Tomography

July 25–26, 2016



Workshop Chair

Prof. Dr.-Ing. Andreas Maier

Prof. Dr. Norbert Pelc

Local Organizing Committee

Christina Ort

Jennifer Maier

Bastian Bier

Workshop Program

Monday
July 25

9:00 Welcome and Opening Remarks - Andreas Maier

9:10 Yan Xia – FAU Erlangen-Nürnberg
Region-of-Interest Imaging with C-arm CT

9:30 Sarah Divel – Stanford University
Development of a Realistic, Dynamic Digital Brain Phantom for CT Perfusion Validation

9:50 Marco Bögel – FAU Erlangen-Nürnberg
CFD meets 4D-DSA

10:10 Coffee Break

10:40 Norbert Pelc – Stanford University
CT versus Tomosynthesis versus Mammography for Detection of Microcalcifications

11:00 Frank Schebesch – FAU Erlangen-Nürnberg
Detection-Based Image Quality Assessment in Breast Phantom Data for Digital Breast Tomosynthesis

11:20 Jennifer Maier – FAU Erlangen-Nürnberg
Analog Non-Linear Transformation-Based Tone Mapping for Image Enhancement in C-arm CT

11:40 Bastian Bier – FAU Erlangen-Nürnberg
Object Removal in Gradient Domain of Cone-Beam CT Projections

12:00 Lunch

13:00 Kerstin Müller – Stanford University
Dual-Energy C-arm CT Imaging – Color Television in IR

13:20 Scott Hsieh – Stanford University
A Theoretical Limit on Dose Reduction with 2D or 3D Iterative Reconstruction

13:40 Zijia Guo – University of Utah
Image Reconstruction using Ellipse-Line-Ellipse Cone-Beam Data

14:00 Coffee Break

14:30 Jang-Hwan Choi – Electronics and Telecommunications Research Institute, S. Korea
Real-Time Tracking of 3D Tumor Motion for Image-Guided Radiation Therapy using Planning 4D MDCT images

14:50 Oliver Taubmann – FAU Erlangen-Nürnberg
Compressed Sensing Reconstruction for 4-D Cardiac C-arm CT

15:10 Tobias Würfl – FAU Erlangen-Nürnberg
Deep Learning Computed Tomography

15:30 Yixing Huang – FAU Erlangen-Nürnberg
Limited Angle Sinogram Restoration based on Helgason-Ludwig Consistency

15:50 End of the Workshop

Monday
July 25

17:00 Social Event
Erlangen City Tour & Dinner at "Alter Simpl"

Tuesday
July 26

9:10 James Sanders – FAU Erlangen-Nürnberg
Data-Driven Respiratory Surrogate Extraction using Laplacian Eigenmaps

9:30 Andre Aichert – FAU Erlangen-Nürnberg
Epipolar Consistency in Fluoroscopy for Image-Based Tracking

9:50 Mathias Unberath – FAU Erlangen-Nürnberg
Consistency in CBCT Rotational Angiography

10:10 Coffee Break

10:40 Andreas Maier – FAU Erlangen-Nürnberg
Fast Generation of DRRs using an Append Buffer

11:00 Paurakh Rajbhandary – Stanford University
Spectral Applications using Optimal Material Decomposition Algorithm

11:20 Picha Shunhavanich – Stanford University
Pulse Pile-Up in Photon Counting Detectors

11:40 Yanye Lu – FAU Erlangen-Nürnberg
Projection-Based Material Decomposition Using Machine Learning for Spectral Computed Tomography

12:00 Lunch

13:00 Christian Riess – FAU Erlangen-Nürnberg
Grating-Based X-ray Phase-Contrast: Image Enhancement and Understanding

13:20 Sebastian Käßler – FAU Erlangen-Nürnberg
Noise in Phase Contrast Tomography

13:40 Shiyang Hu – FAU Erlangen-Nürnberg
3D X-ray Dark-Field Reconstruction

14:00 Coffee Break

14:30 Johannes Bopp – FAU Erlangen-Nürnberg
Optimization of Talbot-Lau Interferometers

14:50 Jens Wetzl – FAU Erlangen-Nürnberg
Iterative Reconstruction for Cardiac Magnetic Resonance Imaging

15:10 Felix Lugauer – FAU Erlangen-Nürnberg
Water Fat Separation in MR

15:30 Manuel Schneider – FAU Erlangen-Nürnberg
Iterative, Radial MR Reconstruction for Motion Modelling in Hybrid PET/MR Imaging

15:50 End of the Workshop

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