STUDY GROUP SESSION
Detection & Correction of Motion in MRI & MRS

Day: Thursday, 4 June 2015
Time: 13:30-15:30
Room: Reception Hall 104 BCD

Study Group Committee:
Chair, Andre J. W. Van der Kouwe; Chair-Elect, Anja C. S. Brau, Ph.D.; Program Director, Peter Vermathen, Ph.D.; Program Director-Elect, Colin Studholme, Ph.D.; Secretary, Thomas Ernst, Ph.D.; Secretary-Elect, Lars G. Hanson, Ph.D.; Treasurer, Nikolaus Weiskopf, Ph.D.; Past Chair, Julian R. Maclaren, Ph.D.

PROGRAM

13:30 Welcome & Business Meeting
Andre J. W. Van der Kouwe, Ph.D.
Massachusetts General Hospital, USA

13:40 Traditional Poster Session

Self-Gating of Respiratory Motion for Pulmonary Ultra Short Echo Time MRI of Infants in the NICU
Andrew Hahn, Ph.D.
University of Wisconsin at Madison, USA

Accelerated & Motion-Robust In Vivo T_2 Mapping from Radially Undersampled Data Using Bloch-Simulation-Based iterative Reconstruction
Noam Ben-Eliezer, Ph.D.
New York University, USA

Improving Quantitative Susceptibility & R_2,* Mapping by Applying Retrospective Motion Correction
Xiang Feng, M.Sc.
Jena University Hospital, Germany

Retrospective Motion Correction in CEST MRI Data using Time Domain Analysis
Nirbhay N. Yadav, Ph.D.
Johns Hopkins University, USA

Assessment of Marker Fixation in Prospective Motion Correction using a Multiple Marker Approach
Benjamin R. Knowles, Ph.D.
University of Freiburg, Germany

The Necessity of Coil Sensitivity & Gradient Non-Linearity Distortion Corrections in Prospective Motion Correction
Uten Yarach, M.Sc.
BMMR, Germany

Contribution of FOV Updating & Reacquisition to Estimates of Cortical Surface Measures in PROMO MPAGE
Joelle E. Sarlis, Ph.D.
National Institutes of Health/ NINDS, USA

Inter-Scan Motion Artefacts in Quantitative R_1, Mapping Require Correction of Coil Sensitivity Profiles
Daniel Papp, M.Sc.
Wellcome Trust Centre for Neuroimaging, United Kingdom

Prospective Motion Correction of DW 3D-MS EPI using Collapsed FatNav (cFatNav)
Mathias Engström, M.Sc.
Karolinska University Hospital, Sweden

Effect of Hand Feedback Visualization on Head Motion During fMRI of Neuropsychological Testing
Mahta Karimpoor, M.Sc.
Sunnybrook Research Institute, Canada

Using Optical Flow to Estimate Displacement Between 3D Navigators in Coronary Angiography
Nicholas Dwork, M.Sc.
Stanford University, USA

3D Free-breathing Abdominal MRI using Robust Navigator Processing with Coil Clustering
Tao Zhang, Ph.D.
Stanford University, USA

Electronic Posters

13:40 Improving Motion Robustness of Pseudo-Continuous Arterial Spin Labeling by Using Real-Time Motion Correction
Michael Helle, Ph.D.
Philips Technologie GmbH, Germany

13:48 Prospective Motion Correction of Segmented Diffusion Weighted EPI
Michael Herbst, Ph.D.
University of Hawaii, USA

13:56 Single Echo EPI Sequence with Dynamic Distortion Correction: Minimization of Errors Due to Motion & Breathing
Barbara K. Dymerska, M.Sc.
Medical University of Vienna, Austria

14:04 A Novel Fully Automatic Motion Correction Scheme for Cardiac Perfusion MR Images Using Group-wise Non-rigid Registration
Sandeep S. Kaushik, M.Sc.
GE Global Research, India

14:12 Motion Detection Improvement of Pencil Beam Navigator Echo with Gradient Reversal Method
Yuji Iwadate, M.Sc.
GE Healthcare, Japan

14:20 Free-Breathing, Self-Navigated RUFIS Lung Imaging with Motion Compensated Image Reconstruction
Anne Menini, Ph.D.
GE Global Research, Germany
14:28  Improved Motion Compensated Reconstruction for 3D Abdominal MRI Using a Self-Navigated Non-Rigid Motion Model  
**Gastão J. L. Cruz, M.Sc.**  
King's College London, United Kingdom

14:36  POCS-Based Reconstruction of Multiplexed Sensitivity Encoded MRI (POCSMUSE): A General Algorithm for Reducing Motion-Related Artifacts  
**Mei-Lan Chu, B.Sc.**  
Duke University Medical Center, USA

15:20  Final Thoughts  
**Andre J. W. Van der Kouwe, Ph.D.**  
Massachusetts General Hospital, USA

15:30  Adjournment