

STUDY GROUP SESSION

Diffusion

Day: Tuesday, 10 May

Time: 16:00-18:00

Room #: Hall 406 D

Study Group Chair, Mara Cercignani, Ph.D.; Vice Chair, Tim Dyrby, Ph.D.; Secretary, Maxime Descoteaux, Ph.D.; Past-Chair: Christopher Hess, Ph.D.;
Committee: 2016-2017 Incoming Committee: Secretary, Jennifer A McNab, Ph.D.; Trainee Representative, Szabolcs Dávid, M.Sc.;
SMRT Representative, Anne Marie Sawyer, B.S., R.T.(R)(MR)FSMRT

16:00	Introduction - Business Meeting & Announcements	Mara Cercignani, Ph.D. Brighton & Sussex Medical School, United Kingdom
16:10	"Breaking the Barriers of Diffusion MR" Introduction of the Diffusion Study Group ISMRM Workshop, 11-16 September 2016 (Lisbon, Portugal)	Christopher Hess, M.D., Ph.D. University of California, San Francisco, USA
Discussion & Debate: "Sheet or No Sheet?"		
16:25	Introduction on the Mathematical Background of the Sheet Structure	Chantal Tax, M.Sc. UMC Utrecht, The Netherlands
16:30	Against	Flavio Dell'Acqua, Ph.D. King's College London
16:40	Pro	Van Wedeen, M.D. Massachusetts General Hospital, USA
16:50	Floor Discussion	
17:00	Traditional & Electronic Poster Session	
17:50	Awards & Concluding Remarks	Maxime Descoteaux, Ph.D. Université de Sherbrooke, Canada
18:00	Adjournment	
Electronic Poster Presenters		
	<i>The Sensitivity of Diffusion MRI in Direct Detection Neuronal Activity: An In-Vitro Assessment</i>	Ruiliang Bai, B.Sc. National Institute of Health, USA
	<i>Fibre Directionality & Information Flow through the White Matter: Preliminary Results on the Fusion of Diffusion MRI & EEG</i>	Samuel Deslauriers-Gauthier, Ph.D. University de Sherbrooke, Canada
	<i>Time-Dependent Diffusion on In Vivo Human Brain Data from the Connectom Scanner</i>	Uran Ferizi, Ph.D. New York University School of Medicine, USA
	<i>Transmural Heterogeneity of In-Vivo Whole Heart Diffusion Parameters: Architecture, Physiology or Artifact?</i>	Martijn Froeling, Ph.D. University Medical Center Utrecht, The Netherlands
	<i>Quantification of Demyelination & Remyelination with Diffusion MRI: Specific In Vivo White Matter Tract Integrity Metrics Agree with Electron Microscopy-Derived Features</i>	Ileana O. Jelescu, Ph.D. New York University School of Medicine, USA
	<i>Caveats of Probabilistic Tractography for Assessing Fiber Connectivity Strength</i>	Seyed Hamed Yousefi Mesri, M.Phil. University Medical Centre Utrecht, The Netherlands
Traditional Poster Presenters		
	<i>Reducing Acquisition Time for Axon Diameter Mapping using Global Optimization in the Spatial-Angular-Microstructure Space</i>	Anna Auria Rasclosa, M.Sc. EPFL, Switzerland
	<i>The Influence of T_2 Relaxation in Measuring the Restricted Volume Fraction in Diffusion MRI</i>	Silvia De Santis, Ph.D. Cardiff University, United Kingdom
	<i>The Apparent Range of Spin Movement in Diffusion MRI Data</i>	Thomas Dela Haije, M.Sc. Eindhoven University of Technology, The Netherlands
	<i>Modelling Radial & Tangential Fibres in the Neocortex</i>	Luke J. Edwards, D.Phil. Max Planck Ctr for Human Cognitive & Brain Sciences, Germany
	<i>Axon Diameter Distribution Influences Diffusion-Derived Axonal Density Estimation in the Human Spinal Cord: In Silico & In Vivo Evidence</i>	Francesco Grussu, Ph.D. University College London, United Kingdom
	<i>An Assessment of Bayesian IVIM Model Fitting</i>	Oscar E. Gustafsson, M.Sc.

<i>Application of a Combined IVIM-DTI Model in ECG-Triggered Imaging of the Human Kidney</i>	Sahlgrenska University Hospital, Sweden Fabian M. Hilbert, M.Phys. University of Würzburg, Germany
<i>Phase-Correcting Non-local Means Denoising for Diffusion-Weighted Imaging</i>	Sevgi Gökçe Kafalı, B.Sc. Bilkent University, Turkey
<i>Non-linear Distortion Correction in Human Optic Nerve Diffusion Imaging</i>	Joo-won Kim, Ph.D. Icahn School of Medicine at Mount Sinai, USA
<i>The Effect of Axon Shape & Myelination on Diffusion Signals in a Realistic Monte Carlo Simulation Environment</i>	Michiel Kleinnijenhuis, Ph.D. FMRIB Centre, University of Oxford, United Kingdom
<i>Estimation of Fiber Packing Correlation Length by Varying Diffusion Gradient Pulse Duration</i>	Hong-Hsi Lee, M.D. New York University School of Medicine, USA
<i>Modelling of Diffusion in Cultured Epithelial Cell Spheroids</i>	Sisi Liang, M.Sc. Victoria University, Australia
<i>Sensitivity of Diffusion Metrics in Complex White Matter Configurations</i>	Pedro A. Luque Laguna, M.Sc. King's College London, United Kingdom
<i>De-Noising of Diffusion-Weighted MRI Data by Averaging of Inconsistent Input Data in Wavelet Space</i>	Henrik Marschner, M.Sc. Max Planck Institute, Germany
<i>Modeling Diffusion of Intracellular Metabolites in the Mouse Brain Up to Very High B: Diffusion in Long Fibers (Almost) Accounts for Non-Monoexponential Attenuation</i>	Marco Palombo, M.D., Ph.D. CEA/DSV/I2BM/MIRCen, France
<i>"Noise" in Diffusion Tractography Connectomes is Not Additive</i>	Michael Paquette, M.Sc. Université de Sherbrooke, Canada
<i>High-Resolution DTI-Based Cortical Connectome Reconstructions Match Incompletely with True Axonal Projections in Rat Brain</i>	Michel R.T. Sinke, M.Sc. University Medical Center Utrecht, The Netherlands
<i>Correcting Spatial Misalignment between Fiber Bundles Segments for Along-Tract Group Analysis</i>	Samuel St-Jean, M.Sc. University Medical Center Utrecht, The Netherlands
<i>Structural Connectivity Analysis at the Voxel Level</i>	Jan-Gerd Tenberge, M.Sc. University of Münster, Germany
<i>A Theoretical Framework for Sampling & Reconstructing Ensemble Average Propagators in Diffusion MRI</i>	Divya Varadarajan, M.Sc. University of Southern California, USA
<i>Intracellular Volume Fraction Estimation In Vivo in Single & Crossing Fibre Regions</i>	Sjoerd B. Vos, Ph.D. University College London, United Kingdom