

ISMRM WORKSHOP ON 40 Years of Diffusion: Past, Present & Future Perspectives

16-20 FEBRUARY 2025 Kyoto University Faculty of Medicine Kyoto, Japan





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Andrey Zhylka, Ph.D. University Medical Center Utrecht Utrecht, The Netherlands

SPEAKER UPLOAD INFORMATION

(Located at Shiran Kaikan Annex)

- Saturday, 15 February 2025 13:00-17:00
- Sunday, 16 February 2025 08:30-09:15
- Monday, 17 February 2025 08:30-09:00
- Tuesday, 18 Februrary 2025 08:45-09:00

PROGRAM CREDIT DESIGNATION

The International Society for Magnetic Resonance in Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The International Society for Magnetic Resonance in Medicine designates this live activity for a preliminary maximum of 20.75* AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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Declarations of financial interests from all workshop participants are available here.

Workshop Program

Day 0: Saturday, 15 February 2025 (No CME available)

13:00-17:00 Registration & Speaker Upload Available (Located at Shiran Kaikan Annex)

Day 1: Sunday, 16 February 2025 - Optional Educational Bootcamp (3.0 CME available)

8:30	Registration & Speaker Upload Available (Located at Shiran Kaikan Annex)
09:15	Introduction

Parallel Boot Camp Sessions 1: Foundations I			
09:30	Diffusion Fundamentals	Nathan Hu Williamson, Ph.D.	
		Moderator: Bradley Karat, B.Sc.	
	Diffusion MRI Acquisitions	Jennifer Campbell, Ph.D. & Sajjad Feizollah, Ph.D.	
		Moderator: Antoine Théberge, M.Sc.	

11:00 Break & Speaker Upload Available

Parallel Boot Camp Sessions 2: Foundations II			
11:30	Diffusion Encodings	Qiuyun Fan, Ph.D. & Ziyu Li, B.Eng.	
		Moderator: Jessie Mosso, Ph.D.	
	Image Processing Pipelines	Daan Christiaens, Ph.D. & Ahmed Radwan, Ph.D.	
		Moderator: Sjoerd Vos, Ph.D.	

13:00 Lunch & Speaker Upload Available

Parallel Boot Camp Sessions 3: Analysis & Applications I			
14:30	Mathematical Representations	Sune Nørhøj Jespersen, Ph.D. & Chantal Tax, Ph.D.	
		Moderators: Alex Valcourt Caron, M.Sc. & Anders D. Sandgaard, Ph.D.	
	Analysis Techniques	Anna Schroder, M.Sc. & Elinor Thompson, Ph.D.	
		Moderator: Elizabeth Powell, Ph.D.	
16:00	Break & Speaker Upload Available		

Parallel Boot Camp Sessions 4: Analysis & Applications II			
16:30	Biological Models of Diffusion	Ricardo Coronado-Leija, Ph.D. & Dmitry Novikov, Ph.D.	
		Moderator: Hong-Hsi Lee, M.D., Ph.D.	
	Tractography	Chun-Hung Yeh, Ph.D., Simona Schiavi, Ph.D. & Joseph Yan-Mou Yang, Ph.D.	
		Moderators: Kurt Schi	illing, Ph.D. & Maryam Tayebi, Ph.D.
17:50	17:50 Closing Remarks		ntiago Coelho, Ph.D. & Amy ward, D.Phil.
18:00	18:00 Fireside Chat: How To Survive Diffusion MRI as a Trainee?		rrek Jones, Ph.D., nis Le Bihan, M.D., Ph.D., & chael Moseley, Ph.D.

18:30

Adjourn

19:00	Trainee Networking Event (until 21:00)		
Day 2: Monday, 17 February 2025 (4.25 available)			
08:30	Registration & Speaker Upload Available (Located at Shiran Kaikan	Annex)	
	Session 1: Introduction		
Moderators: Susie Huang, M.D., Ph.D. & Mami lima, M.D., Ph.D.			
09:00	Welcome	Susie Huang, M.D., Ph.D. & Mami lima, M.D., Ph.D.	
09:15	Keynote: From Brownian Motion to Virtual Biopsy: A Historical Perspective from 40 Years of Diffusion MRI	Denis Le Bihan, M.D., Ph.D. CEA Neurospin Gif-Sur-Yvette, France	
Session 2: Hardware, Acquisition & Processing			
Moderators: Gabriel Ramos-Llordén, Ph.D. & Jelle Veraart, Ph.D.			
10:00	Hardware: Field Strength	An Joseph Vu, Ph.D. University of San Francisco San Francisco, CA, USA	
		Gigi Galiana, Ph.D	

10:30	Hardware: Gradient	Gigi Galiana, Ph.D Yale University New Haven, CT, USA
11:00	Advanced Diffusion Encoding Pulse Sequences: Tips, Tricks & Scary Stories	Filip Szczepankiewicz, Ph.D. Lund University Lund, Sweden
11:30	Break & Speaker Upload Available	
12:00	Sequence Image Formation	Erpeng Dai, Ph.D. Stanford University Stanford, CA, USA

Proffered Papers - Oral Session (No CME available)		
12:30	Enhanced Gradient Capabilities at 7T Using a Three-Axes Plug-&-Play Head Gradient Insert	Gerrit Arends, M.Sc. University Medical Center Utrecht Utrecht, The Netherlands
12:38	Self-Navigated 3D Diffusion MRI Using Simultaneous Multislab with Blipped-CAIPI	Hua Guo, Ph.D. Tsinghua University Beijing, China
12:45	Time-Dependent µFA Measurements Enables by Spectrally Specific & Matched Spherical Tensor Diffusion Encoding	Runpu Hao, M.Sc. Eidgenössische Technische Hochschule Zürich Zurich, Switzerland
12:53	Peripheral Nerve Stimulation (PNS) Characterization of OGSE Diffusion Encoding in an Ultra-High Performance Gradient 3T MRI System	Ante Zhu, Ph.D. GE HealthCare Technology & Innovation Center Niskayuna, NY, USA
13:02	Lunch & Speaker Upload Available	
	Fireside Chat: Handling Disruptions in Imaging & Science	Thomas Foo, Ph.D.,
14:30	Moderator: Roderic Pettigrew, M.D., Ph.D.	Bruce Rosen, M.D. & Kawin Setsompop, Ph.D.
	Session 3: Tractography & Connectivity	
Moderator	s: Alexander Leemans, Ph.D. & Carl-Fredrik Westin, Ph.D.	
15:00	Tractography Visualization	Anna Villanova, Ph.D. Eindhoven University of Techonology Eindhoven, The Netherlands
15:30	Tracking Methods for Short Association Fibers	Dmitri Šastin, Ph.D. Cardiff University Cardiff, Wales, UK
16:00	The Future of Tractography	Maxime Descoteaux, Ph.D. Université de Sherbrooke Sherbrooke, QC, Canada
16:30	Break & Speaker Upload Available	
Proffered	Papers - Oral Session	-
16:45	Accurate Modeling of Diffuse Axonal Fiber Degeneration with the Discrete Cosine Transform	Gaia Mari, M.Sc. University of Verona Verona, Italy
16:53	TractMMR: Tractography Streamline Rating Through User-Guided Matchmaking	Ruben Vink, M.Sc. Eindhoven University of Technology Eindhoven, The Netherlands
17:01	Effect of Diffusion MRI Acquisiton & Nominal Spatial Resolutions on Fiber Reconstruction & Connectivity Estimation	Jialan Zheng, Undergraduate Tsinghua University Beijing, China
17:09	A Microscopy-Trained Model To Predict Super-Resolution Fibre Orientations from Diffusion MRI	Silei Zhu, Ph.D. Candidate University of Oxford Oxford, England, UK

17:17	Senior Expert-Led Panel Discussion	Maxime Descoteaux, Ph.D., Dmitri Šastin, Ph.D. & Anna Villanova, Ph.D.			
	Session 4: Power Pitches, Poster & Consensus Session				
Moderato	rs: Maxime Chamberland, Ph.D. & Masaaki Hori, M.D.				
17:45	Power Pitch Session				
	Optimization of Oscillating Diffusion Encoding Gradient Reduces Mechanical Vibration on Ultra-High Gradient System	Xingzhou Chen, B.Sc. Zhejiang University Hangzhou, China			
	3D MERMAID: 3D Multishot Enhanced Recovery Motion Artifact Insensitive Diffusion Sequence for Submillimeter SNR Efficient Diffusion Imaging	Sajjad Feizollah, Ph.D. McGill University Montreal, QC, Canada			
	Data-Driven Optimal Experimental Design for Multi-Shell Diffusion MRI of the Adult Brain	Patrick Fuchs, Ph.D. University of Antwerp Antwerp, Beligum			
	Open-Source, PNS-Constrained & Optimized Gradient Waveform Design for Brain Diffusion Tensor Imaging	Ariel Hannum, M.Sc. Stanford University Stanford, CA, USA			
Submillimeter 3D Diffusion MRI Using In-Plane Segmented Multi-Slab EPI & Denoiser-Regularized Reconstruction		Ziyu Li, Ph.D. University of Oxford Oxford, England, UK			
	Serial Acquisition of Radiofrequency Pulse Modes (SAMO) with Multiband EPI Allows Diffusion MRI To Reach Its Full Potential at 7T	Bradford Moffat, Ph.D. The University of Melbourne Parkville, VIC, Australia			
	Multisubject Analysis of Distortion Reduction in DWI Through Dynamic B Field Measurement with a Field Probe-Equipped Coil Array	Matthew Nielsen, B.Sc. Canon Medical Systems Corporation Kanagawa-Ken, Japan			
	Concomitant Gradients in dMRI at Low Fields &/or Ultra-Strong Gradients: A Correction Method To Avoid Signal Errors	Viktor Olsson, B.Sc. Lund University Lund, Sweden			
	Rapid Implicit Spatio-Temporal Field Estimation & Correction (D- FESTIVE) Applied for Single-Shot Spiral Diffusion MRI	Zachary Shah, M.Sc. Stanford University Stanford, CA, USA			
	Benefits & Cost of Cross-Term Compensation in STE Waveform Design: From the Rotational Stability Perspective	Jingguo Yan, B.Sc. Tianjin University Tianjin, China			
	Joint k-q-TE Reconstruction for Accelerated Combined Diffusion- Relaxometery Imaging	Xinyu Ye, M.Sc. University of Oxford Oxford, England, UK			
	Motion Robust Joint K-Q Reconstruction for Accelerated Multi-Band Diffusion MRI	Xinyu Ye, M.Sc. University of Oxford Oxford, England, UK			
	Microstructural Imaging with a Nonlinear Gradient: Pushing the Limit of Short Diffusion Time	Horace Zhang, M.Sc. Yale University New Haven, CT, USA			

		Steven Baete, Ph.D.
	Fiber Tractography: Linear Versus Planar b-Tensor Encoding DWI	New York University Grossman
		New York, NY, USA
	Anisotropy Boosting Improves ODF-Fingerprinting Tractography in Edematous Brain	Patryk Filipiak, Ph.D. New York University Langone Health New York, NY, USA
		liaira Gabusi M Se
	Consensus Tractography: Decreasing Algorithm Dependency for Improved Fiber Reconstructions	University of Verona Verona, Italy
	Do Current Automated Tractography Methods Hold Up in Tumor &	Steven Greenstein, M.Sc.
	Epilepsy Pathology? A Comparison of Four Methods with Expert	Murdoch Children's Research Institute
	Manual Tractography	Parkville, VIC, Austalia
	Multifeaster d'Atlas of Currenticie IV//bite Methor Dethures I line of Illus	Yifei He, B.Sc.
	High-Field Diffusion MRI	Technology Nanjing, China
	Improved Shading & Performance Using Density Volumes in	Bram Kraaijeveld, M.Sc.
	Interactive Tractography Visualization	Eindhoven University of Technology Eindhoven, The Netherlands
		Jon Haitz Legarreta, Ph.D.
	Streamline Arithmetics in Tractography Using Autoencoders	Boston, MA, USA
	Graph-Based Spatial Regularization of Richardson-Lucy Spherical	Richard Stones, Ph.D.
	Deconvolution Can Improve Fiber Orientation Estimates & Generate Asymmetric ODFs	King's College London London, England, UK
18:30	Poster Session	
19:00	Adjourn & Dinner on Own	

Day 3: Tuesday, 18 February 2025 (7.25 CME available)

08:30	Registration & Speaker Upload Available	
08:45	Keynote: Microstructure	Peter Basser, Ph.D. National Institutes of Health Bethesda, MD, USA

Session 5: Microstructure of the Brain & Validation			
Moderators: Kouhei Kamiya, M.D. & Chantal Tax, Ph.D.			
09:15	Current Development & Application of Microstructural MRI	Corey Baron, Ph.D. Western University London, ON, Canada	
09:45	Microstructure of the Brain: Recent Advances in Validation	Tim Dyrby, Ph.D. Cophenhagan University Hospital Copenhagan, Denmark	
10:15	Microstructure of the Brain: Clinical Applications	Jennifer McNab, Ph.D. Stanford University Stanford, CA, USA	
10:45	Break & Speaker Upload Available		
11:15	Preclinical Imaging	Noam Shemesh, Ph.D. Champalimaud Foundation Lisbon, Portugal	
Proffered	Papers - Oral Session		
11:45	Studying Brain Microstructure in Normal Ageing Using Neurite Exchange Imaging (NEXI) at 500 m/Tm	Kwok-Shing Chan, Ph.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA	
11:52	Detecting Dendritic Spine Density with Double Diffusion Encoding Magnetic Resonance Spectroscopy	Maëliss Jallais, Ph.D. Cardiff University Brain Research Centre Cardiff, Wales, UK	
11:59	Which Microvascular Properties Can We Probe in Clinical Settings with Diffusion MRI?	Anna Voronova, M.Sc. Vall d'Hebron Institute of Oncology Barcelona, Spain	
12:06	Diffusion Time Dependence of Kurtosis in Human Brain Using b- Tensor Free Gradient Waveforms	Mi Zhou, B.Sc. University of Alberta Calgary, AB, Canada	
12:17	Expert-Led Panel Discussion	Corey Baron, Ph.D., Tim Dyrby, Ph.D., Jennifer McNab, Ph.D. & Noam Shemesh, Ph.D.	
12:45	Lunch & Speaker Upload Available		
14:15	Fireside Chat: Beyond Diffusion MRI: Multimodal Approaches	Els Fieremans, Ph.D., Jennifer McNab, Ph.D. & Susumu Mori, Ph.D.	
	Session 6: Diffusion in the Body & Oncole	рду	
Moderators: Dennis Ennis, Ph.D. & Gigin Lin, M.D., Ph.D.			
14:45	Challenges in Body Diffusion & How To Overcome Them	Francesco Grussu, Ph.D. Vall d'Hebron Institute of Oncology Barcelona, Spain	
15:15	Advanced Diffusion Models in the Body	Jessica Winfield, Ph.D. Royal Marsden Hospital London, England, UK	

15:45	Body Diffusion in the Clinic: Present & Future	Shintaro Ichikawa, M.D., Ph.D. Hamamatsu University School of Medicine Hamamatsu, Japan
16:15	Break & Speaker Upload Available	
Proffered	Papers - Oral Session	
16:30	Perfusion Fraction Mapping with IVIM in Prostrate: The Benefit of Velocity-Compensated Encoding	Malwina Molendowska, Ph.D. Lund University Lund, Sweden
16:38	Validation of Intravoxel Incoherent Motion MRI Using Perfused Explanted Human Livers	Gregory Simchick, Ph.D. University of Wisconsin-Madison Madison, WI, USA
16:45	Feasibility of Predicting Chemoradiation Treatment Response of p16- Positive Oropharyngeal Squamous Cell Carnicoma Using Time- Dependent Diffusion MRI	Eddy Solomon, Ph.D. Weill Cornell Medical College New York, NY, USA
16:54	Prostrate Diffusion-Weighted Imaging with an Inside-Out Nonlinear Gradient Coil	Horace Zhang, M.Sc. Yale University New Haven, CT, USA
17:02	Expert-Led Panel Discussion	Francesco Grussu, Ph.D. & Shintaro Ichikawa, M.D., Ph.D.
	Session 7: Power Pitches, Poster & Consensus S	essions
Moderator	s: Andrada Ianus, Ph.D. & Gregory Simchick, Ph.D.	
17:35	Power Pitch Session	
	Evaluating Sensitivity of Quantitative MRI to Myelin & Axonal Integrity Using Histological Validation	Ali Abdollahzadeh, Ph.D. University of Eastern Finland Kuopio, Finland
	Micro/Macro Kurtosis Tensor Invariants & 4-Fold DDE Angular Modulation in the Human Brain	Santiago Coelho, Ph.D. New York University School of Medicine New York, NY, USA
	Quantifying Unmyelinated Axons from Time-Dependent Radial Kurtosis in Brain White Matter	Ricardo Coronado-Leija, Ph.D. New York University Grossman School of Medicine New York, NY, USA
	Scan-Rescan Repeatability of Axon Diameter Mapping Metrics from Ultra-High-Gradient Diffusion MRI on the Connectome 2.0 Scanner	Laleh Eskandarian, M.Sc. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
	Higher Order Rotational Invariants Improve Parameter Estimation for SMEX	Nayereh Ghazi, M.Sc. Aarhus University Aarhus, Denmark
	Implicit Neural Representations for Diffusion MRI Modeling	Tom Hendriks, M.D. Eindhoven University of Technology Eindhoven, The Netherlands

Free-Water-Eliminated (FWE)-SANDI To Improve the Accuracy of In Vivo Apparent Soma & Neurite Imaging Using High-Gradient Diffusion MRI	Hansol Lee, Ph.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
MyCaliber: Axon Diameter Mapping from Myelin Water Diffusion- Theory & Monte Carlo Simulations	Hong Hsi Lee, M.D., Ph.D. Massachusetts General Hospital Boston, MA, USA
The "Stick Compartment" in a Human Brain Using in Vivo Diffusion of Water & Metabolites	Jessie Mosso, Ph.D. New York University Grossman School of Medicine New York, NY, USA
Histologically Informed Periodic Axon Substrate Generator for Time- Dependent Diffusion Weighted-MRI	TuanKhai Nguyen, B.Sc. Vanderbilt University Nashville, TN, USA
Maximum-Entropy & Subspace Methods for High-Resolution- Relaxation Correlation Spectrsocopy Analysis	Lipeng Ning, Ph.D. Brigham & Women's Hospital Boston, MA, USA
Rotation-Free Estimation of Anisotropic Transverse Relaxation & Larmor Frequency Shifts in Intra-Axonal Space with Diffusion MRI: A Monte Carlo Study in Axonal Phantoms	Anders Sandgaard, Ph.D. Aarhus University Aarhus, Denmark
An Analytical Model of Restricted Diffusion in Dendritic Spines	Kadir Şimşek, Ph.D. Cardiff University Cardiff, Wales, UK
Active Water Exchange Is Insignificant on 1 to 100 ms Timescales in the Neonatal Mouse Spinal Cord	Nathan Williamson, Ph.D. Military Traumatic Brain Injury Initiative (MTBI2) Bethesda, MD, USA
Microscopic Propagator Imaging (MPI) with Diffusion MRI	Tommaso Zajac, B.Sc. University of Verona Verona, Italy
Common Coordinate Frameworks of Developmental Marmoset Brain from Birth to Adolescence Based on Ultra-High-Resolution Diffusion MRI	Tianjia Zhu, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
Distortion-Free Diffusion-Weighted Imaging of the Prostrate Using TGSE-Based Golden-Angle PROPELLER Acquisiton & Deep Learning Denoising	Jingjia Chen, Ph.D. New York University Grossman School of Medicine New York, NY, USA
Histology-Informed Microstructural Diffusion Simulations (Histo-µSim) for Enhanced Diffusion MRI Parameter Estimation in Cancer	Athanasios Grigoriou, M.Sc. Vall d'Hebron Institute of Oncology Barcelona, Spain
High Resolution Diffusion MRI of Surgical Specimen Reveals Detailed Anatomy of the Rectal Wall	Andrada Ianus, Ph.D. King's College London London, England, UK
The Effect of Diffusion MRI Preprocessing on ADC Estimates in Prostrate Cancer Patients	Christos Kanakis, M.Sc. University Medical Center Utrecht Utrecht, The Netherlands
Deep Learning for Automated Breast Tumor Detection & Classification in Diffusion-Weighted MRI	Yunhao Zhang, M.D. Nagoya University Hospital Nagoya, Japan

18:15	Poster Session
19:05	Adjourn & Dinner on Own

Day 4: Wednesday, 19 February 2025 (4.25 CME available)		
08:30	Registration & Speaker Upload Available	
08:45	Keynote: Research to Clinic	Jens Jensen, Ph.D. Medical University of South Carolina Charlestown, SC, USA
	Session 8: From Research to the Clinic	
Moderato	rs: TBA	
09:30	Neurodegenerative Diseases	Christina Andica, M.D., Ph.D. Graduate School of Medicine Juntendo University Tokyo, Japan
10:00	Cardiac Diffusion MRI	Daniel Ennis, Ph.D. Stanford University Stanford, CA, USA
10:30	Break & Speaker Upload Available	
11:00	Developing Brain	Sila Genc, Ph.D. Royal Children's Hospital Parkville, VIC, Australia
Proffered	Papers - Oral Session	
11:30	Investigating Paramagnetic Rim & Non-Rim Lesions in Multiple Sclerosis: A Microstructural Approach with SANDI & NEXI	Sittaya Buathong, M.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
11:38	Single-Shell Diffusion MRI Metrics in the Brain: How They Relate to Blood Markers of Inflammation	Lucy Hui, B.Sc. Rotman Research Institute Toronto, ON, Canada
11:45	Longitudinal Assessment of Brain & Spinal Cord Microstructural Damage in Multiple Sclerosis Using the Soma & Neurite Density Imaging (SANDI) Model Applied to Multi-Shell Diffusion-Weighted MRI Data	Frederik Novak, M.D. Centro de Esclerosis Mútiple de Cataluña Barcelona, Spain
11:53	Association of Medial Prefrontal Myo-Inositol with Changes in Brain White Matter Microstructure in Early Psychosis	Tommaso Pavan, M.Sc. Lausanne University Hospital (CHUV) Lausanne, Switzerland
12:02	Expert-Led Panel Discussion	Christina Andica, M.D., Ph.D. & Sila Genc, Ph.D.
12:30	Lunch & Speaker Upload Available	
14:00	Fireside Chat: Successes & Pitfalls of Clinical Collaborations	Masako Kataoka, M.D., PhD., Gigin Lin, M.D., Ph.D. & Ona Wu, Ph.D.

Session 9: AI & Big Data		
Moderators: Kawin Setsompop, Ph.D. & Chuyang Ye, Ph.D.		
14:30	Charting Multi-Scale Brain Phenotypes Using Spectral Normative Models	Sina Mansour L., Ph.D. University of Melbourne Melbourne, VIC, Australia
15:00	Machine Learning Methods To Enhance the Capabilities of Diffusion MRI for Studying the Fetal Brain	Davood Karimi, Ph.D. Harvard Medical School Boston, MA, USA
15:30	A Guided Tour of Generative AI in Neuroimaging & Tractometry	Paul Thompson, Ph.D. University of Southern California Los Angeles, CA, USA
16:00	Break & Speaker Upload Available	-
Proffered	Papers - Oral Session	
16:15	Flexible Tractography Using a Local, Data-Driven Microstructure Representation	Siebe Leysen, M.Sc. Katholieke Universiteit Leuven Leuven, Belgium
16:23	Angular Super-Resolution in Diffusion MRI Using an Autoregressive Diffusion Transformer with Random Mask Modelling	Mu Nan, M.Sc. Shenzhen Institute of Advanced Technology Shenzhen, China
16:31	DeepEddy: High-Quality Eddy Current & Bulk Motion Correction Using Deep Learning-Based Image Synthesis & Co-Registration	Jize Zhang, B.Sc. Wellcome Centre for Integrative Neuroimaging Oxford, England, UK
16:39	Diffusion MRI-Based Estimation of Cortical Architecture via Machine Learning (DECAM) Enhanced by Cortical Label Vectors	Tianjia Zhu, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
16:47	Expert-Led Panel Discussion	Davood Karimi, Ph.D, Sina, Mansour L., Ph.D. & Paul Thompson, Ph.D.
	Session 10: Power Pitches, Poster & Consensus	Sessions
Moderator	s: Jon Haitz Legarreta Gorroño, Ph.D. & Masaaki Hori, M.D., Ph.D.	
17:15	Power Pitch Session	
	Characterizing Axonal Damage in Ischemic Stroke Using AxCaliber MRI in High-Gradient Diffusion Imaging	Aneri Bhatt, B.Sc. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
	Evaluation of Multiple Sclerosis Disease Severity with Brain Microstructure Charts of Controls Using Clinical Diffusion MRI	Jenny Chen, M.Sc. New York University Grossman School of Medicine New York, NY, USA
	Theta Burst Stimulation of the Right Inferior Frontal Gyrus in Autism: Linking White Matter Alterations to Social Cognitive Improvements	Jing-Ru Chen, B.Sc. Chang Gung University Taoyuan City, Taiwan
	DeepHIBRID: Accelerating High-Resolution Microstructure Mapping Using Multi-Shell Diffusion MRI for Acute Ischemic Stroke	Tanxin Dong, B.Sc. Tianjin University Tianjin, China

Fiber Tractography of the Dentate-Rubro-Thalamic Tract Before & During Brain Surgery of Children with Posterior Fossa Tumor	Pien Jellema, M.Sc. Princess Máxima Centre Utrecht, The Netherlands
Objective Prediction of Neurocognitive Impairment in Pediatric Drug- Resistant Epilepsy by Quantifying Seizure-Affected Brain Network Abnormalities in Clinical DWI Connectome	Jeong-Won Jeong, Ph.D. Wayne State University Detroit, MI, USA
Diffusion MRI Harmonization by Linear Regression of Rotational Invariants of the Cumulant Expansion (LinearRICE)	Kouhei Kamiya, M.D. Toho University Tokyo, Japan
A Comprehensive Framework for Identifying White Matter Altercations in Mild Cognitive Impairment Using Diffusion-Analysis	Daehun Kang, Ph.D. Mayo Clinic Rochester, MN, USA
Cortical Column Profile of Diffusion Metrics in Alzheimer's Disease by Submillimeter Whole-Brain 3D Diffusion MRI	Haotian Li, Ph.D. Zhejiang University Hangzhou, China
Age-Related Alterations in Tissue Microstructure Along Perforant Pathway of Hippocampus & the Tract Template Development	Yixin Ma, Ph.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
Comparison of Diagnostic Power Between Susceptibility & Diffusion Imaging in Differentiating Multiple System Atrophy from Parkinson's Disease	Byeongpil Moon, B.Sc. Seoul National University Seoul, South Korea
Cortical Cholinergic Pathways Denervation for Early Detection of Alzheimer's Disease Using Correlational Tractography	Pohchoo Seow, Ph.D. Singapore General Hospital Singapore
Compare the Structural Connectivity Between the Temporal Lobe & Insula in Patients with Temporal Lobe Epilepsy & Healthy Individuals	Chang Wen-Po, B.Sc. National Yang Ming Chiao Tung University Hsinchu, Taiwan
A Deep Nonlinear Subspace Modelling & Reconstruction for Diffusion-Weighted Imaging Using Variational Auto-Encoder: Latent Space Decoded Reconstruction (LASER)	Julius Glaser, M.Sc. University Hospital Erlangen Erlangen, Germany
BrainSFUDA: Fetal Brain Extraction from Diffusion-Weighted MR Images Using Source-Free Unsupervised Domain Adaption	Yijin Li, B.Sc. Beihang University Beijing, China
Virtual Cell Type Atlas of Mouse Brain from Diffusion MRI Signatures Using Attention Res-UNet	Yiqi Shen, B.Sc. Zhejiang University Hangzhou, China
Generative AI for Normative Tractometry: Mapping Microstructural Abnormalities in Dementia	Yixue Feng, M.Sc. University of Southern California Los Angeles, CA, USA
LabelSeg: Automatic Tract Labelling Without Tractography	Antoine Théberge, M.Sc. Université de Sherbrooke Sherbrooke, QC, Canada
A Microscopy-Trained Model To Predict Super-Resolution Fibre Orientations from Diffusion MRI	Silei Zhu, Ph.D. Candidate University of Oxford Oxford, England, UK

18:00	Poster Session (No CME Available)
19:00	Adjourn
19:30	Networking Dinner

Day 5: Thursday, 20 February 2025 (2.0 CME available)		
08:30	Registration & Speaker Upload Available (Located at Shiran Kaikan Annex)	
	Session 11: On the Horizon: Cutting Edge Topics & Future Direction	s in Diffusion MRI Research
Moderato	rs: Martijn Froeling, Ph.D. & Masaaki Hori, M.D., Ph.D.	
09:00	Across-Scales Connectivity Mapping of the Developmental Primate Brain	Hao Huang, Ph.D. University of Pennsylvania Philadelphia, PA, USA
09:30	DWI/DTI on Neurofluids	Toshiaki Taoka, M.D., Ph.D. Nagoya University Nagoya, Japan
10:00	IVIM	Christian Federau, M.D. University of Zürich Zurich, Switzerland
10:30	DWI-PET	Sho Koyasu, M.D., Ph.D. Kyoto University Kyoto, Japan
11:00	11:00 Poster Session (No CME Available)	
11:30	11:30 Trainee Awards & Closing Remarks	
12:00) Farewell & Boxed Lunch	

Posters

Poster	Title	Author
1	Bilateral Breast Gradient Insert Prototype for Strong Diffusion Encoding	Gerrit Arends, M.Sc. University Medical Center Utrecht Utrecht, The Netherlands
2	Optimization of Acquisition Schemes Towards a Better Estimation of Microstructure Parameters in Diffusion MRI	Constance Bocquillion, M.Sc. University of Rennes Rennes, France
3	Automating Field Camera Measurements for High Resolution Spiral DWI Acquisitions with 300mT/m Gradient Strength	Ying Chu, Dr. rer. nat. Max Planck Institute for Human Cognitive & Brain Sciences Leipzig, Germany
4	Developing a Tensor-Valued Diffusion Encoding Protocol for Studying Brain Microstructure Changes in the Aging Process	Erpeng Dai, Ph.D. Stanford University Stanford, CA, USA
5	Estimate the Effects of Imaging Gradients & Gradient Miscalibration on the b-Matrix Using an Isotropic Diffusion Platform	Ruifeng Dong, Ph.D. National Institutes of Health Bethesda, MD, USA
6	First-Order Motion Compensation for Diffusion MRI Using a Velocity Navigator	Thomas Ernst, Ph.D. University of Maryland School of Medicine Baltimore, MD, USA
7	High-Resolution Connectome-Level dMRI Within Practical Acquisition Times Using an Ultra-High Performance Gradient System at 3T	Jose Guerro-Gonzalez, Ph.D. University of Wisconsin-Madison Madison, WI, USA
8	From Noise to Clarity: MP-PCA Denoising of Complex Imaging Data Enhances High-Resolution Diffusion MRI	Omnia Hassanin, M.Sc. New York University Grossman School of Medicine New York, NY, USA
9	High Resolution Q-Space Trajectory Imaging Using Interleaved EPI with JETS-NAVI Image Reconstruction at 7 Tesla: Preliminary Results	Annika Hofmann, M.Sc. Friedrich-Alexander-Universität Erlangen- Nürnberg Erlangen, Germany
10	High-Resolution Diffusion MRI with Slice-By-Slice B0 Shimming in a Head-Only High-Performance Gradient 3T MRI System	Patricia Lan, Ph.D. GE HealthCare Menlo Park, CA, USA
11	Accelerated Radial Diffusion Spectrum Imaging by Leveraging Compressed Sensing	Christian Licht, Ph.D. Stanford University Stanford, CA, USA
12	Higher Fidelity Frequency-Dependent Measurements Using a Linear Encoding Model	Eric Michael, M.Sc. Eidgenössische Technische Hochschule Zürich Zurich, Switzerland
13	Towards High-Resolution Diffusion-Relaxation MRI by Slice Excitation with Random Overlap (SERO)	Felix Mortensen, M.Sc. Lund University Lund, Sweden
14	The Hidden Bias in Diffusion-MRI: According for Imaging Gradients in b-& m1-Values for Intravoxel Incoherent Motion Analysis	Ivan A. Rashid, M.Sc. Lund University Lund, Sweden

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15	Optimizing Acquisition & Preprocessing for High-Fidelity High- Resolution 7T Diffusion MRI for Microstructure & Connectivity Modeling	Kurt Schilling, Ph.D. Vanderbilt University Medical Center Nashville, TN, USA
16	Assessing the Effects of Scanner Upgrade on DTI MD Using a Traceable Phantom	Agnieszka Sierhej, M.Sc. University College London London, England, UK
17	Reproductibility of DTI Parameters in Automatically Segmented WM Tracts Across Three MRI Scanners of the Same Type	Agnieszka Sierhej, M.Sc. University College London London, England, UK
18	Pulseq Implementation of Overlapped Readout Segmented EPI with Phase Fluctuations Corrected by Shift-Invariant Kernel Extraction	Rui Tian, M.sc. Max Plank Institute of Biological Cybernetics Tübingen, Germany
19	Enhancing Microstructural Sensitivity in Diffusion MRI: A Two- Step Denoising Approach for Data from a High-Performance 7T Scanner	Yi-Hang Tung, Ph.D. Otto-von-Guericke-Universität Magdeburg Magdeburg, Germany
20	Nf-Neuro: Developing Maintainable Pipelines for Seamless Processing of Diffusion MRI	Alex Valcourt Caron, M.Sc. Université de Sherbrooke Sherbrooke, QC, Canada
21	Eddy-Current Distortion Correction in Tensor-Valued Diffusion MRI: Do Encoding Waveforms Matter?	Sjoerd Vos, Ph.D. University of Western Australia Perth, WA, Australia
22	3D Single-Slab & mMulti-Slab DWI Using 3D Accelerated MUSER (3D-AccMUSER) with Spectrum Analysis & Variable- Density CAIPI	Xiaorui Xu, Ph.D. Candidate University of Hong Kong Hong Kong, China
23	fMRI-Based Tractography Filtering	Matteo Battocchio, Ph.D. University of Verona Verona, Italy
24	Tractography-Based Automatic Lesion Detection in Pathological Brains	Sara Bosticardo, M.Sc. University of Verona Verona, Italy
25	Influencing Factors on Apparent Fiber Density (AFD): Insights from Simulations	Yutong Cao, B.Sc. Tianjin University Tianjin, China
26	DTI Geodesic Tractography Without Quadratic Restriction	Luc Florack, Ph.D. Eindhoven University of Technology Eindhoven, The Netherlands
27	Improving Manual Tractography by Automating Spurious Streamline Removal: An Application in Paediatric Tumour Patients	Steven Greenstein, M.Sc. Murdoch Children's Research Institute Parkville, VIC, Austalia
28	Tractfinder for Paediatric Optic Radiation Segmentation	Yi Jie Li, B.Sc. University College London London, England, UK
29	Improving Neuroanatomical Consistency in Connectomics: Optimizing Brain Connectivity Analysis	Busra Mutlu Ipek, Ph.D. Student King's College London London, England, UK

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30	Towards Clinical Application of Structural Connectomics: Robust Longitudinal Estimation of Whiter Matter Connectivity	Philip Pruckner, M.D. The Florey Institute of Neuroscience & Mental Health Parkville, VIC, Australia
31	Teaching Fiber Tracking Using Neurodesk: Experience in a Biomedical Sciences Master Course	Pim Pullens, Ph.D. Ghent University Hospital & Ghent University Ghent, Beligum
32	Can Tractography Predict Electrophysiological Connectivity?	S. Shailja, Ph.D. Stanford University Stanford, CA, USA
33	Segmentation of Diffusion Tracts To Develop a Digital Tractographic Atlas for Avian Brains	Himanshu Singh, M.Sc. All India Institute of Medical Sciences Delhi New Delhi, India
34	The Microstructure-Weighted Human Connectome: Network & Relationship with Conduction Speed	Arthur Spencer, Ph.D. Lausannne University Hospital (CHUV) Lausanne, Switzerland
35	Interactive Microstructure-Guided Tractogram Visualization in Blender	Zhang Zhenting, M.Sc. Candidate Nanjing University of Science & Technology Nanjing, China
36	Ex Vivo Investigation of a Simple Estimate of Axon Size	Hannah Alderson, B.Sc. Vanderbilt University Nashville, TN, USA
37	Coarse-Graining with Time-Dependent Diffusion Reveals Signatures of Extra-Axonal Space Micro-Geometery	Ricardo Coronado-Leija, Ph.D. New York University Grossman School of Medicine New York, NY, USA
38	White Matter Regions of Interest in Diffusion MRI & X- Separation (Chi-Separation)	Chungseok Oh, B.Sc. Seoul National University Seoul, South Korea
39	Axonal & Cellular Impermeable Diffusion (ACID) Imaging	Marco Pizzolato, Ph.D. Technical University of Denmark Kongens Lyngby, Denmark
40	Towards Non-Invasive Quantification of Myelin Sheath Radius: A Diffusion MRI Model for Random Walks Confined to Cylindrical Surfaces	Jonathan Rafael-Patiño, Ph.D. Swiss Federal Technology Institute of Lausanne Lausanne, Switzerland
41	High b-Value Spherical Diffusion Encoding-A Robust Approach for Reducing CSF Contamination in Mean Diffusivity Mapping of the Cortex	Cornelia Säll, M.Sc. Lund University Lund, Sweden
42	Revealing Membrane Integrity in Human Brain Using Oscillating-Gradient Diffusion Sequence in Two Frequency- Varying Regimes	Dongsuk Sung, Ph.D. Massachusetts General Hospital Boston, MA, USA
43	Estimating the Axonal & Cellular Impermeable Diffusion (ACID) Model	Thina Lundsgaard Thøgersen, M.Sc. Technical University of Denmark Kongens Lyngby, Denmark

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44	Spatiotemporal Changes of Cortical Cytoarchitectural Complexity Across Brain Regions & Between Genders During Infancy	Ziqin Zhang, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
45	Mesoscopic Digital Phantoms of Cortical Microstructure for Diffusion MRI Simulations	Charlie Aird-Rossiter, M.Sc. Cardiff University Cardiff, Wales, UK
46	Machine Learning Fitting Approaches for the Standard Model of White Matter: A Comparison	Gerrit Arends, M.Sc. University Medical Center Utrecht Utrecht, The Netherlands
47	Modeling Pseudorandom Flow in CSF Measured with Low b- Value DTI (Low-b DTI)	Yoshitaka Bito, Ph.D. Hokkaido University Graduate School of Medicine Sapporo, Japan
48	DiffKAN3D: Efficient & Accurate 3D Diffusion MRI Parameter Estimation for Real-Time Clinical Applications	Yifei Chen, B.Sc. Hangzhou Dianzi University Hangzhou, China
49	A Multi-Purpose Phantom with Adjustable ADC Values & Relaxation Times	Victor Fritz, M.Sc. University of Tübingen Tübingen, Germany
50	Time to Equilibrium: The Simulation of Restricted Diffusion with Two Diffusion Coefficients	Jessica Goldring, M.Sc. National Physical Laboratory Teddington, London, UK
51	Micostructure.JI: A Julia Package for Probabilistic Microstructure Model Fitting with Diffusion MRI	Ting Gong, Ph.D. Massachusetts General Hospital Boston, MA, USA
52	Monte Carlo Simulations of Time- & Frequency-Dependent Kurtosis with Pulsed & Oscillating Gradients	Runpu Hao, M.Sc. Eidgenössische Technische Hochschule Zürich Zurich, Switzerland
53	A Traveling Subjects Dataset for Diffusion MRI Harmonization Benchmarking	Janice Hau, Ph.D. San Diego State University San Diego, CA, USA
54	Diffusion MRI Denoising Effects on SANDI Microstructure Estimates in Healthy Elderly at 3T	Sebastian Hübner, M.Sc. University of Trento Trento, Italy
55	Optimized Diffusion Protocol for SMEX on Clinical Scanners	Sune Jespersen, Ph.D. Aarhus University Aarhus, Denmark
56	The Gain of Adding Noise: Improved Tissue Microstructure Estimation Using Supervised Machine Learning	Bradley Karat, B.Sc. University of Western Ontario London, ON, Canada
57	ReMiDi: Reconstruction of Microstructure from Diffusion MRI Signal	Prathamesh Prandeep Khole, Ph.D. University of California, Santa Cruz Santa Cruz, CA, USA
58	DIMOND++: Improving Diffusion Model Optimization Using Diffusion Priors	Zihan Li, B.Sc. Tsinghua University Beijing, China

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59	Diffusion MRI-Based Explicit Microstructural Imaging Analysis	Fan Liu, Ph.D. Candidate Tsinghua University Beijing, China
60	Accurate Super-Resolution of Diffusion MRI Data at Ultra- Strong Gradients & Varying Diffusion Time Using Image Quality Transfer	Eleonora Lupi, M.Sc. Università Degli Studi di Pavia Pavia, Italy
61	Direct Diffusion Kurtosis Tensor Estimation Using a Model- Based Method with Tensor Smoothness Constraint	Jian Lyu, Ph.D. The First People's Hospital of Foshan Guang Dong Sheng, China
62	Voxel-Based Normative Modelling of Brain Microstructure with GAMLSS	Tommaso Pavan, M.Sc. Lausanne University Hospital (CHUV) Lausanne, Switzerland
63	Enhancing Accuracy & Precision of IVIM Estimates via b-Value Optimization & a New Simplified Ballistic Model	Elina Petersson, M.Sc. University of Gothenburg Gothenburg, Sweden
64	Tailoring Microstructural Specificity of Diffusion MRI Using T2* Filtering	Ricardo Rios-Carrillo, Ph.D. Western University London, ON, Canada
65	The Hemodynamic Influence on Diffusion MRI at Multiple b- Values in the Healthy Human Cerebral White Matter	Yutong Sun, M.Sc. University of Toronto Toronto, ON, Canada
66	Effect Size-Based Optimization of Encoding Parameters in Diffusion Tensor Imaging	Ekin Taskin, M.Sc. École Polytechnique Fédérale de Lausanne Lausanne, Switzerland
67	dMRI-Lab: A Computationally Efficient MATLAB Toolbox for Quantitative Diffusion MRI Analysis Pipelines	Antonio Tristán-Vega, Ph.D. Universidad de Valladolid Valladolid, Spain
68	Improving Multi-Bingham Fitting on the Orientation Distribution Function-Characterizing Fiber Crossing & Dispersion Simultaneously	Julio E. Villalón-Reina, M.D., Ph.D. University of Southern California Los Angeles, CA, USA
69	Ex Vivo Validation of Diffusion Basis Spectrum Imaging in Human Placenta	Qing Wang, Ph.D. Washington University in St. Louis St. Louis, MO, USA
70	Jointly Multi-Model Microstructural Estimation on Diffusion MRI with Contextual Features Aggregation	Tenglong Wang, Ph.D. Nanjing University of Science & Technology Nanjing, China
71	Withdrawn	
72	Optimising Diffusion MRI Measurements To Maximize Microstructural Sensitivity Using Monte Carlo Simulations & Estimation Theory	Zhiyu Zheng, M.Sc. University of Oxford Oxford, England, UK
73	Diffusion MRI of Murine Spinal Cord with Multi-Shot Rosette Readouts at 15.2T	Tzu-Wei Lee, B.Sc. Vanderbilt University Nashville, TN, USA
74	Diffusion MRI at 28.2T with 3T/m Gradient Strength To Image Organoids with Micrometer Resolution	Tatiana Nikolaeva, Ph.D. University Medical Center Utrecht Utrecht, The Netherlands

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75	Brain Microstructural Changes in a Vcan Mouse Model Measured with MRI & Histology: Reverse Translation for Interpretation of Population Neuroimaging	Cristiana Tisca, D.Phil. Wellcome Centre for Integrative Neuroimaging Oxford, England, UK
76	Maturation of Marmoset Cortical Cytoarchitecture from Birth to Adolescence with Ultra-High-Resolution Diffusion MRI	Tianjia Zhu, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
77	Feasibility of Diffusion-MRI Derived Cardiomyocyte Diameter Measurements Using Ultra-High-Performance Gradient Systems	Jacob Blum, B.Sc. Stanford University Stanford, CA, USA
78	Effect of b Values & Choice of Fat Suppression Method on Lesion Evaluation in Breast DWI	Erika Inoue, M.D. Kitano Hospital Osaka, Japan
79	Diagonal Versus Three-Directional Trace Diffusion-Weighted Imaging for 3T Breast MRI: Phantom & Clinical Study	Yusuke Jo, M.D. Nagoya University Hospital Nagoya, Japan
80	Usefulness of IVIM-DKI Model Parameters Estimated by Synethic q-Space Learning in Classifying Breast Tumors	Kousei Konya, B.Sc. Tohoku University Graduate School of Medicine Sendai City, Japan
81	Initial Evaluation of Deep Resolve Boost & Sharp for Cardiac Diffusion Tensor Imaging in Healthy Volunteers	Yuchi Liu, Ph.D. Siemens Medical Solutions USA, Inc. Malvern, PA, USA
82	A Novel Framework for Restriction-Weighted q-Space Trajectory Imaging (resQ) Demonstrated in Prostrate Cancer	Malwina Molendowska, Ph.D. Lund University Lund, Sweden
83	A Stimulation-Adapted Gradient Design for Velocity- Compensated IVIM Demonstrated in Prostrate at 200mTm	Malwina Molendowska, Ph.D. Lund University Lund, Sweden
84	Assessment of PARVA & ILK Expression in Breast Cancer: A Time-Dependent Diffusion MRI Approach	Ayu Shirakashi, B.Sc. Kyoto University Kyoto, Japan
85	Dependency of the IVIM Signal on the First-Order Motion Moment & Encoding Duration in the Liver & Kidneys	Gregory Simchick, Ph.D. University of Wisconsin-Madison Madison, WI, USA
86	Pros & Cons of High-Performance Gradient Enabled Short-TE Prostrate DWI: A Prospective Study	Dominika Skwierawska, Ph.D. Candidate Friedrich-Alexander-Universität Erlangen- Nürnberg Erlangen, Germany
87	Generating High b-Value Images with Associated Uncertainty Using a Gaussian Process Model (gpDWI) as an Alternative to Computed DWI (cDWI)	Imogen Thrussell, Ph.D. Institute of Cancer Research London, England, UK
88	Characterizing Breast Cancer Microstructures in Response to Immunotherapy Using VERDICT-MRI & Its Correspondence with Histology	Han Zang, B.Sc. Tianjin University Tianjin, China
89	Deep Learning-Based Phase Correction Improved DWI for Bladder Cancer Imaging	Shu Zhang, Ph.D. Houston Methodist Research Institute Houston, TX, USA

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90	Enhanced Diffusion MRI of Infant Brain at 0.35 Tesla Using a Self-Training Two-Stage Framework	Zhibo Chen, B.Sc. Zhejiang University Hangzhou, China
91	qSR-DiffNet: Q-Space Super-Resolution in Diffusion MRI with Non-Gaussian Residual Conditional Diffusion Model	Wenxin Fan, Ph.D. Shenzhen Institutes of Advanced Technology Shenzhen, China
92	Performance Evaluation of Denoising Deep Neural Network Applied in Different Diffusion Tensor Image Processing Stages	Rokgi Hong, B.Sc. Seoul National University Seoul, South Korea
93	Withdrawn	
94	Enhancing Diffusion MR Tractography Using a Deep Learning Model that Incorporates Anatomical Knowledge	Zifei Liang, Ph.D. Bernard & Irene Schwartz Center for Biomedical Imaging New York, NY, USA
95	Acceleraed Diffusion Tensor Imaging Using a Diffusion Generative Deep Learning Model	Philip Martin, Ph.D. Houston Methodist Research Institute Houston, TX, USA
96	Accelerated Deep-Learning for Model-Free & Multi-Shell (ATLAS) DWI	Philip Martin, Ph.D. Houston Methodist Research Institute Houston, TX, USA
97	Noise2DWI: Accelerated Diffusion Tensor Imaging with Self- Supervision & FineTuning	Philip Martin, Ph.D. Houston Methodist Research Institute Houston, TX, USA
98	TractGPT: Using Transformer Models To Predict Along-Tract Profiles	Remika Mito, Ph.D. University of Melbourne Parkville, VIC, Australia
99	Structural Connectomics Informed by Large Language Models	Elinor Thompson, Ph.D. University College London London, England, UK
100	A Unified Framework for High-Fidelity Continuous Super- Resolution in Diffusion MRI	Ruoyou Wu, Ph.D. Shenzhen Institute of Advanced Technology Shenzhen, China
101	Direction-Based Latent Implicit Neural Representation for Accelerated Multi-Shell Diffusion MRI	Tian Zeng, B.Sc. Shanghai Jiao Tong University Shanghai, China
102	High Resolution DTI Shows Lower Radiality Within Cortical Lesions of Multiple Sclerosis	Alejandro Acosta, M.Sc. University of Alberta Edmonton, AB, Canada
103	Ethnic Variation in Hippocampal Microstructure Across Cognitive Diagnosis in Women Using Advanced Diffusion MRI	Taylor Ariko, B.Sc. University of Miami Coral Gables, FL, USA
104	Beta-Amyloid Plaque Microstructure by High-Resolution QSM & dMRI	Jie Chen, Ph.D. University of Texas Southwestern Dallas, TX, USA
105	Exploring Connectivity Abnormalities in Glioma Through Structural & Functional Integrated Anomaly Detection	Maria Colpo, M.Sc. Padova Neuroscience Center Padua, Italy

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106	Bundle-Wise Detection of White Matter Degeneration of the Human Optic Nerves & Chiasm of Patients with Asymmetric Glaucoma Using Diffusion-Weighted MRI	Daniela Coutiño, B.Sc. Universidad Nacional Autonoma de Mexico Mexico City, Mexico
107	The Fuzzy MAD Stroke Conjecture, Using Fuzzy C Means to Classify Multimodal Apparent Diffusion for Ischemic Stroke Lesion Stratification	Frederick Damen, Ph.D. University of Illinois Chicago Chicago, IL, USA
108	First Application of the Standard Model of Diffusion to Subjective Cognitive Decline Reveals Novel Insights into White Matter Microstructure	Ryn Flaherty, M.Phil. New York University Grossman School of Medicine New York, NY, USA
109	Evaluating DWI Methods in Epidermoid Cyst Patients TGSE- BLADE DWI vs. SS-EPI DWI	Yasutakaka Fushimi, M.D., Ph.D. Kyoto University Kyoto, Japan
110	The Sense of Smell Atlas: Its Creation & First Application To Investigate COVID-19-Related Anosmia with Quantitative Multimodal-MRI	Marta Gaviraghi, Ph.D. University of Pavia Pavia, Italy
111	Microstructural & Susceptibility Alterations in White Matter & Cerebellum Are Linked to Fatigue & Cognitive Dysfunction in Long-COVID	Elena Grosso, M.Sc. University of Pavia Pavia, Italy
112	White Matter Evoluation of Patients with Chronic Muscloskeletal Pain After Physiotherapy Intervention Using Free-Water Corrected DTI	Irene Guadilla, Ph.D. Universidad Autónoma de Madrid Madrid, Spain
113	Exchange Time from Time-Dependent Diffusion-Weighted MRI as a Potential Biomarker for Treatment Response in Human Brain Metasis	Elise Gwyther, Ph.D. Student Cardiff University Cardiff, Wales, UK
114	Diffusion Tensor Imaging Biomarkers Indicating Long Lasting Post-Concussion Abnormalities in a Youth Pig Model of Mild Traumatic Brain Injury	Sanjida Islam, B.Sc. Michigan State University East Lansing, MI, USA
115	Tract-Based Spatial Statistics of Older & Younger Adults with Down Syndrome	Phoebe Ivain, M.Sc. King's College London London, England, UK
116	Microstructural Alterations in Mild & Repetitive Mild Close Head Injuries	Ahmad Raza Khan, Ph.D. National Brain Research Centre Haryana, India
117	White Matter Microstructure & Macrostructure Brain Charts Across the Human Lifespan: 23, 971 Participants from 25 Datasets	Michael Kim, B.Sc. Vanderbilt University Nashville, TN, USA
118	Mapping Age-Related Cortical Laminar-Specific Microstructural Alterations Across the Lifespan Using High-Gradient Diffusion MRI	Hansol Lee, Ph.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
119	Microstructural Abnormalities in the Visual Pathway: Associations with Glymphatic Dysfunction in Alzheimer's Disease	Ji Young Lee, M.D., Ph.D. Seoul St. Mary's Hospital Seoul, South Korea
120	Fixel-Based Analysis of White Matter Fiber Characteristics & Cognitive Dsyfunction in Alzheimer's Disease	Wenxuan Li, B.Sc. Duke Kunshan University Suzhou, China

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121	Widespread Changes in Blood-Brain Barrier Permeability to Water Detected by VEXI in Acute Ischemic Stroke	Zhaoqing Li, Ph.D. Affiliated Sir Run Run Shaw Hospital, Zhejiang University School of Medicine Zhejiang, China
122	Maturation of Long-& Short-Range Tracts in Macaque Brain with Ultra-High-Resolution Diffusion MRI	Runjia Lin, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
123	Uncovering Subtle White Matter Changes in Semantic Dementia: Insights from Fixel-Based Analysis	Maria Luisa Mandelli, Ph.D. University of California, San Francisco San Francisco, CA, USA
124	Analysis of Altercations of Cortical Microstructure with B- Tensor Encoding in an Animal Model of Cortical Dysplasia	Olimpia Ortega-Fimbres, M.Sc. Universidad Nacional Autonoma de Mexico Mexico City, Mexico
125	NODDI Measures of Microstructural Integrity in Medial Temporal Lobe White Matter Pathways Are Associated with Alzheimer's Disease Pathology & Cognitive Outcomes	Dana Parker, M.Sc. University of California, Irvine Irvine, CA , USA
126	White Matter Structural Progression in Neuroinflammatory Disorders Using Free Water Corrected DTI Parameters with 1.5 Shells: Application to Persistent Headache After COVID-19	Álvaro Planchuelo-Gómez, Ph.D. Universidad de Valladolid Valladolid, Spain
127	Harmonization of Diffusion MRI Measures is Crucial for White Matter Tract Normative Assessment in ADNI	Maggie Roy, Ph.D. Université de Sherbrooke Sherbrooke, QC, Canada
128	A Pilot Study of Normative Modeling of NODDI Metrics in Deep Nuclear Pathways of the Elderly: Insights from the Taiwan Precision Medicine Initiative on Cognitive Impairment & Dementia Data	Yao-Chia Shih, Ph.D. Yuan Ze University Taoyuan City, Taiwan
129	Diffusion Tensor Informed Functional Activity Highlight Treatment Response in Young Amblyopia	Himanshu Singh, M.Sc. All India Institute of Medical Sciences Delhi New Delhi, India
130	Age & Sex Differences in Functional Network Gray Matter Microstructure	Abhijot Singh Sidhu, Ph.D. Student University of Calgary Calgary, AB, Canada
131	Free Water Fraction Correlates with Disability in Multiple Sclerosis & Reflects Perivascular Space Enlargement	Valentin Stepanov, M.D. New York University Grossman School of Medicine New York, NY, USA
132	High Resolution DTI Shows Decreasing Radiality in Cortex After Human Acute Ischemic Stroke	Zhongyi (Jenny) Sun, B.Sc. University of Alberta Edmonton, AB, Canada
133	Impact of Subconcussive Head Acceleration on Brain Microstructure: Longitudinal Diffusion MRI Findings & Symptom Correlation	Maryam Tayebi, Ph.D. Mātai Medical Research Institute Gisborne, New Zealand
134	Reproducibility Diffusion Tensor Parameters Across Large Multi-Center Study Diffusion MRI Protcols	Jamie Wren-Jarvis, M.Sc. New York University Grossman School of Medicine New York, NY, USA

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135	DTL-ALPS Plus: A New Technique for Measuring Glymphatic System Outflow with Enhanced Sensitivity to ISF & Robustness	Bingjie Jiao, Ph.D. Zhejiang University Hangzhou, China
136	Exploring Aging-Related Diffusion Properties in the Perivascular Space	Ho-Ching Yang, Ph.D. Indiana University School of Medicine Indianapolis, IN, USA
137	Placental Blood-Flow Velocity Quantification from Diffusion MRI	ZhuangJian Yang, Ph.D. University College London London, England, UK
138	Evidence of Incoherent Fluids Flow in the Brain From Multidimensional Intravoxel Incoherent MRI	Chenyang Li, Ph.D. New York University Grossman School of Medicine New York, NY, USA
139	Relaxation-Selective Intravoxel Incoherent Motion Imaging of Microvascular Perfusion & Fluid Compartments in the Human Choroid Plexus	Chenyang Li, Ph.D. New York University Grossman School of Medicine New York, NY, USA
140	Revisiting the ALPS Index: Structural Bias on the Glymphatic Interpretation as Revealed by Post-Mortem AD Brains	Sihui Li, B.Sc. Zhejiang University Hangzhou, China
141	Diffusion Kurtosis Imaging (DKI) & Transvascular Wall Water Exchange Imaging (VEXI) in Preoperative Prediction of Glioma Grade & ATRX Mutation Status	Yan Bai, M.D. Henan Provincial People's Hospital Zhengzhou, China
142	DKI & DTI in Preoperatively Differentiating Corticotrophin from Non-Corticotrophin Pituitary Macroadenomas	Yan Bai, M.D. Henan Provincial People's Hospital Zhengzhou, China
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144	Vascular-Water-Exchange MRI (VEXI) & Diffusion Kurtosis Imaging (DKI) in the Glioma Grading & IDH Mutation Status Prediction	Yan Bai, M.D. Henan Provincial People's Hospital Zhengzhou, China
145	The Effects of Medication on White Matter Integrity in Obsessive-Compulsive Disorder	Shuangwei Chai, Ph.D. Sichuan University Sichuan, China
146	Longitudinal Assessment of Neurostructural Changes in Depressive Patients with Differential Suicidality According to GQI	Chien-Lin Cheng, B.Sc. Chang Gung University Taoyuan City, Taiwan
147	Designing a Clinical Diffusion MRI Acquisition To Measure White Matter Damage in Paediatric Brain Tumour Patients	Emily Drabek-Maunder, Ph.D. University College London London, England, UK
148	Heterogeneity of Pre-Treatment Supratentorial White Matter Abnormalities in Children with Paediatric Posterior Fossa Tumours	Emily Drabek-Maunder, Ph.D. University College London London, England, UK
149	Diurnal Variation in Brain Diffusion Measures in 8,277 Preadolescents	Thomas Ernst, Ph.D. University of Maryland School of Medicine Baltimore, MD, USA

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150	Microstructural Characterisation of Focal Cortical Dysplasia in Paediatric Epilepsy Patients Using Clinical MRI	Sila Genc, Ph.D. The Royal's Children's Hospital Parkville, VIC, Australia
151	Hippocampal Atrophy, White Matter Hyperintensities & White Matter Reductions in Late-Life Major Depressive Disorder	Bo Han Huang, B.Sc. Far-Eastern Memorial Hospital New Taipei City, Taiwan
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153	Comprehensive Multi-Modal MRI Templates of the Infant Brain: A Foundational Resource for Early Developing Brain Studies	Ruolin Li, Ph.D. Candidate University of Pennsylvania Philadelphia, PA, USA
154	Examining "Neural Soma" Compartments in Paediatric Epilepsy To Support Focal Cortical Dysplasia Lesion Detection	Yi Jie Li, B.Sc. University College London London, England, UK
155	Optic Radiation Microstructure as a Biomarker of Visual Function in Paediatric Bardet-Biedl Syndrome	Yi Jie Li, B.Sc. University College London London, England, UK
156	Genetic & Environmental Influence on Variation of the Auditory Cortex & White Matter Morphology in Mexicans: A Twin Study	Gerson Robles Rodríguez, B.Sc. Universidad Nacional Autonoma de Mexico Mexico City, Mexico
157	Increased BOLD Variability Is Accompanied by Changes in Tissue Microstructure & Upregulation of Gliogenesis in the Preterm Infant Cortex	Joana Sa de Almeida, Ph.D. Murdoch Children's Research Institute Parkville, VIC, Australia
158	Longitudinal MRI Assessment of Brain Changes in Parkinson's Disease	Esther Kozlowski, M.Sc. Paris Brain Institute Paris, France
159	Alterations of Region-Specific Structure-Function Couplings in Patients with Parkinson's Disease	Rong Liu, M.D. The Second Affiliated Hospital of Soochow University Suzhou, China
160	High Resolution Diffusion Imaging Demonstrate Regional Abnormalities in Ipsilateral & Contralateral Hippocampi of Patients with Temporal Lobe Epilepsy	Shahryar Pourkalhor, Undergraduate University of Alberta Edmonton, AB, Canada
161	White Matter Alterations in Parkinson's Disease: Influence of Glucose Levels in Diabetic Patients	Chih-Chien Tsai, Ph.D. Chang Gung University Taoyuan City, Taiwan
162	Optimization of Oscillating Diffusion Encoding Gradient Reduces Mechanical Vibration on Ultra-High Gradient System	Xingzhou Chen , B.Sc. Zhejiang University Hangzhou, China
163	3D MERMAID: 3D Multishot Enhanced Recovery Motion Artifact Insensitive Diffusion Sequence for Submillimeter SNR Efficient Diffusion Imaging	Sajjad Feizollah, Ph.D. McGill University Montreal, QC, Canada
164	Data-Driven Optimal Experimental Design for Multi-Shell Diffusion MRI of the Adult Brain	Patrick Fuchs, Ph.D. University of Antwerp Antwerp, Beligum

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166	Submillimeter 3D Diffusion MRI Using In-Plane Segmented Multi-Slab EPI & Denoiser-Regularized Reconstruction	Ziyu Li, Ph.D. University of Oxford Oxford, England, UK
167	Serial Acquisition of Radiofrequency Pulse Modes (SAMO) with Multiband EPI Allows Diffusion MRI To Reach Its Full Potential at 7T	Bradford Moffat, Ph.D. The University of Melbourne Parkville, VIC, Australia
168	Multisubject Analysis of Distortion Reduction in DWI Through Dynamic B Field Measurement with a Field Probe-Equipped Coil Array	Matthew Nielsen, B.Sc. Canon Medical Systems Corporation Kanagawa-Ken, Japan
169	Concomitant Gradients in dMRI at Low Fields &/or Ultra-Strong Gradients: A Correction Method to Avoid Signal Errors	Viktor Olsson, B.Sc. Lund University Lund, Sweden
170	Rapid Implicit Spatio-Temporal Field Estimation & Correction (D-FESTIVE) Applied for Single-Shot Spiral Diffusion MRI	Zachary Shah, M.Sc. Stanford University Stanford, CA, USA
171	Benefits & Cost of Cross-Term Compensation in STE Waveform Design: From the Rotational Stability Perspective	Jingguo Yan, B.Sc. Tianjin University Tianjin, China
172	Joint k-q-TE Reconstruction for Accelerated Combined Diffusion-Relaxometry Imaging	Xinyu Ye, M.Sc. University of Oxford Oxford, England, UK
173	Motion Robust Joint K-Q Reconstruction for Accelerated Multi- Band Diffusion MRI	Xinyu Ye, M.Sc. University of Oxford Oxford, England, UK
174	Microstructural Imaging with a Nonlinear Gradient: Pushing the Limit of Short Diffusion TIme	Horace Zhang, M.Sc. Yale University New Haven, CT, USA
175	Withdrawn	
176	Fiber Tractography: Linear Versus Planar b-Tensor Encoding DWI	Steven Baete, Ph.D. New York University Grossman School of Medicine New York, NY, USA
177	Anisotropy Boosting Improves ODF-Fingerprinting Tractography in Edematous Brain	Patryk Filipiak, Ph.D. New York University Langone Health New York, NY, USA
178	Consensus Tractography: Decreasing Algorithm Dependency for Improved Fiber Reconstructions	liaira Gabusi, M.Sc. University of Verona Verona, Italy
179	Do Current Automated Tractography Methods Hold Up in Tumor & Epilepsy Pathology? A Comparison of Four Methods with Expert Manual Tractography	Steven Greenstein, M.Sc. Murdoch Children's Research Institute Parkville, VIC, Austalia
180	Multifaceted Atlas of Superficial White Matter Pathway Using Ultra-High-Field Diffusion MRI	Yifei He, B.Sc. Nanjing University of Science & Technology Nanjing, China

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181	Improved Shading & Performance Using Density Volumes in Interactive Tractography Visualization	Bram Kraaijeveld, M.Sc. Eindhoven University of Technology Eindhoven, The Netherlands
182	Streamline Arithmetics in Tractography Using Autoencoders	Jon Haitz Legarreta, Ph.D. Harvard Medical School Boston, MA, USA
183	Graph-Based Spatial Regularization of Richardson-Lucy Spherical Deconvolution Can Improve Fiber Orientation Estimates & Generate Asymmetric ODFs	Richard Stones, Ph.D. King's College London London, England, UK
184	Evaluating Sensitivity of Quantitative MRI to Myelin & Axonal Integrity Using Histological Validation	Ali Abdollahzadeh, Ph.D. University of Eastern Finland Kuopio, Finland
185	Withdrawn	
186	Micro/Macro Kurtosis Tensor Invariants & 4-Fold DDE Angular Modulation in the Human Brain	Santiago Coelho, Ph.D. New York University School of Medicine New York, NY, USA
187	Quantifying Unmyelinated Axons from Time-Dependent Radial Kurtosis in Brain White Matter	Ricardo Coronado-Leija, Ph.D. New York University Grossman School of Medicine New York, NY, USA
188	Scan-Rescan Repeatability of Axon Diameter Mapping Metrics from Ultra-High-Gradient Diffusion MRI on the Connectome 2.0 Scanner	Laleh Eskandarian, M.Sc. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
189	Higher Order Rotational Invariants Improve Parameter Estimation for SMEX	Nayereh Ghazi, M.Sc. Aarhus University Aarhus, Denmark
190	Implicit Neural Representations for Diffusion MRI Modeling	Tom Hendriks, M.D. Eindhoven University of Technology Eindhoven, The Netherlands
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192	MyCaliber: Axon Diameter Mapping from Myelin Water Diffusion-Theory & Monte Carlo Simulations	Hong Hsi Lee, M.D., Ph.D. Massachusetts General Hospital Boston, MA, USA
193	The "Stick Compartment" in a Human Brain Using In Vivo Diffusion of Water & Metabolites	Jessie Mosso, Ph.D. New York University Grossman School of Medicine New York, NY, USA
194	Histologically Informed Periodic Axon Substrate Generator for Time-Dependent Diffusion Weighted-MRI	TuanKhai Nguyen, B.Sc. Vanderbilt University Nashville, TN, USA
195	Maximum-Entropy & Subspace Methods for High-Resolution- Relaxation Correlation Spectrsocopy Analysis	Lipeng Ning, Ph.D. Brigham & Women's Hospital Boston, MA, USA

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197	An Analytical Model of Restricted Diffusion in Dendritic Spines	Kadir Şimşek, Ph.D. Cardiff University Cardiff, Wales, UK
198	Withdrawn	
199	Microscopic Propagator Imaging (MPI) with Diffusion MRI	Tommaso Zajac, B.Sc. University of Verona Verona, Italy
200	Common Coordinate Frameworks of Developmental Marmoset Brain from Birth to Adolescence Based on Ultra-High- Resolution Diffusion MRI	Tianjia Zhu, M.Sc. Children's Hospital of Philadelphia Philadelphia, PA, USA
201	Distortion-Free Diffusion-Weighted Imaging of the Prostrate Using TGSE-Based Golden-Angel PROPELLER Acquisiton & Deep Learning Denoising	Jingjia Chen, Ph.D. New York University Grossman School of Medicine New York, NY, USA
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203	High Resolution Diffusion MRI of Surgical Specimen Reveals Detailed Anatomy of the Rectal Wall	Andrada Ianus, Ph.D. King's College London London, England, UK
204	The Effect of Diffusion MRI Preprocessing on ADC Estimates in Prostate Cancer Patients	Christos Kanakis, M.Sc. University Medical Center Ultrecht Utrecht, The Netherlands
205	Deep Learning for Automated Breast Tumor Detection & Classification in Diffusion-Weighted MRI	Yunhao Zhang, M.D. Nagoya University Hospital Nagoya, Japan
206	Characterizing Axonal Damage in Ischemic Stroke Using AxCaliber MRI in High-Gradient Diffusion Imaging	Aneri Bhatt, B.Sc. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
207	Evaluation of Multiple Sclerosis Disease Severity with Brain Microstructure Charts of Controls Using Clinical Diffusion MRI	Jenny Chen, M.Sc. New York University Grossman School of Medicine New York, NY, USA
208	Theta Burst Stimulation of the Right Inferior Frontal Gyrus in Autism: Linking White Matter Alterations to Social Cognitive Improvements	Jing-Ru Chen, B.Sc. Chang Gung University Taoyuan City, Taiwan
209	DeepHIBRID: Accelerating High-Resolution Microstructure Mapping Using Multi-Shell Diffusion MRI for Acute Ischemic Stroke	Tanxin Dong, B.Sc. Tianjin University Tianjin, China
210	Fiber Tractography of the Dentate-Rubro-Thalamic Tract Before & During Brain Surgery of Children with Posterior Fossa Tumor	Pien Jellema, M.Sc. Princess Máxima Centre Utrecht, The Netherlands

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213	A Comprehensive Framework for Identifying White Matter Alterations in Mild Cognitive Impairment Using Diffusion-Analysis	Daehun Kang, Ph.D. Mayo Clinic Rochester, MN, USA
214	Cortical Column Profile of Diffusion Metrics in Alzheimer's Disease by Submillimeter Whole-Brain 3D Diffusion MRI	Haotian Li, Ph.D. Zhejiang University Hangzhou, China
215	Age-Related Alterations in Tissue Microstructure Along Perforant Pathway of Hippocampus & the Tract Template Development	Yixin Ma, Ph.D. Athinoula A. Martinos Center for Biomedical Imaging Charlestown, MA, USA
216	Comparison of Diagnostic Power Between Susceptibility & Diffusion Imaging in Differentiating Multiple System Atrophy from Parkinson's Disease	Byeongpil Moon, B.Sc. Seoul National University Seoul, South Korea
217	Cortical Cholinergic Pathways Denervation for Early Detection of Alzheimer's Disease Using Correlational Tractography	Pohchoo Seow, Ph.D. Singapore General Hospital Singapore
218	Withdrawn	
219	High Resolution Diffusion Kurtosis Imaging of Hippocampus Over the Healthy Lifespan	Pablo Stack-Sanchez, M.Sc. University of Alberta Edmonton, AB, Canada
220	Histology Validation of Generalized Diffusion Basis Spectrum Imaging in Postmortem AD Brain	Qing Wang, Ph.D. Washington University in St. Louis St. Louis, MO, USA
221	Compare the Structural Connectivity Between the Temporal Lobe & Insula in Patients with Temporal Lobe Epilepsy & Healthy Individuals	Chang Wen-Po, B.Sc. National Yang Ming Chiao Tung University Hsinchu, Taiwan
222	A Deep Nonlinear Subspace Modelling & Reconstruction for Diffusion-Weighted Imaging Using Variational Auto-Encoder: Latent Space Decoded Reconstruction (LASER)	Julius Glaser, M.Sc. University Hospital Erlangen Erlangen, Germany
223	BrainSFUDA: Fetal Brain Extraction from Diffusion-Weighted MR Images Using Source-Free Unsupervised Domain Adaption	Yijin Li, B.Sc. Beihang University Beijing, China
224	Virtual Cell Type Atlas of Mouse Brain from Diffusion MRI Signatures Using Attention Res-UNet	Yiqi Shen, B.Sc. Zhejiang University Hangzhou, China
225	Generative AI for Normative Tractometry: Mapping Microstructural Abnormalities in Dementia	Yixue Feng, M.Sc. University of Southern California Los Angeles, CA, USA
226	LabelSeg: Automatic Tract Labelling Without Tractography	Antoine Théberge, M.Sc. Université de Sherbrooke Sherbrooke, QC, Canada
227	A Microscopy-Trained Model To Predict Super-Resolution Fibre Orientations from Diffusion MRI	Silei Zhu, Ph.D. Candidate University of Oxford Oxford, England, UK



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