Vladimir Golkov

List of Publications

Bias and Precision Analysis of Diffusional Kurtosis Imaging for Different Acquisition Schemes,

[J2] V. Golkov, A. Dosovitskiy, J. I. Sperl, M. I. Menzel, M. Czisch, P. Sämann, T. Brox and D. Cremers,
q-Space Deep Learning: Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,

[C1] V. Golkov, T. Sprenger, J. I. Sperl, M. I. Menzel, M. Czisch, P. Sämann and D. Cremers,
Model-Free Novelty-Based Diffusion MRI,
_IEEE International Symposium on Biomedical Imaging (ISBI)_ , Prague, Czech Republic, April 2016.

Using Diffusion and Structural MRI for the Automated Segmentation of Multiple Sclerosis Lesions,

Robustness of Phase Sensitive Reconstruction in Diffusion Spectrum Imaging,

[C3] A. Menini, V. Golkov and F. Wiesinger,
Free-Breathing, Self-Navigated RUFIS Lung Imaging with Motion Compensated Image Reconstruction,

[C4] V. Golkov, J. M. Portegies, A. Golkov, R. Duits and D. Cremers,
Holistic Image Reconstruction for Diffusion MRI,
_MICCAI 2015 Workshop on Computational Diffusion MRI_, Munich, Germany, Springer, October 2015, Oral Presentation and Book Chapter.

[C5] A. Dosovitskiy, P. Fischer, E. Ilg, P. Husser, C. Hazirbas, V. Golkov, P. van der Smagt, D. Cremers and T. Brox,
FlowNet: Learning Optical Flow with Convolutional Networks,
_IEEE International Conference on Computer Vision (ICCV)_ , December 2015.

q-Space Deep Learning for Twelve-Fold Shorter and Model-Free Diffusion MRI Scans,
_Medical Image Computing and Computer Assisted Intervention (MICCAI)_ , Munich, Germany, October 2015.


[C3] V. Golkov, M.I. Menzel, T. Sprenger, A. Menini, D. Cremers and J.I. Sperl,
Reconstruction, Regularization, and Quality in Diffusion MRI Using the Example of Accelerated Diffusion Spectrum Imaging,
16th Annual Meeting of the German Chapter of the ISMRM, 2013, Oral Presentation.

SNR-dependent Quality Assessment of Compressed-Sensing-Accelerated Diffusion Spectrum Imaging Using a Fiber Crossing Phantom,

Phase Sensitive Reconstruction in Diffusion Spectrum Imaging Enabling Velocity Encoding and Unbiased Noise Distribution,

Noise Reduction in Accelerated Diffusion Spectrum Imaging through Integration of SENSE Reconstruction into Joint Reconstruction in Combination with q-Space Compressed Sensing,

Evaluation of DSI Imaging with Compressed Sensing under the Presence of Different Noise Levels on a Diffusion Phantom,

Comparison of Diffusion Kurtosis Tensor Estimation Methods in an Advanced Quality Assessment Framework,