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### Research Interests

- Whole Body MRI
- Time of Flight MR Angiography

### Projects

- Time of Flight Angiography of the peripheral veins

### Journal Papers

- Han Y, Weigel M, Huff S, Ludwig U. Whole-Body Diffusion-Weighted Imaging with a Continuously Moving Table Acquisition Method: Preliminary Results. Magn Reson Med, in press.
- Huff S, Honal M, Baumann T, Hennig J, Markl M, Ludwig U. Continuously Moving Table Time-of-Flight Angiography of the Peripheral Veins. Magn Reson Med 2010,63(5):1219-29.
- Honal M, Leupold J, Huff S, Baumann T, Ludwig U. Compensation of breathing motion artifacts for MRI with continuously moving table. Magn Reson Med 2010, 63(3):701-12.
- Laun FB, Huff S, Stieltjes B. On the effects of dephasing due to local gradients in diffusion tensor imaging experiments: relevance for diffusion tensor imaging fiber phantoms. Magn Reson Imaging 2009, 27(4):541-8.

### Conference Abstracts

- Huff S, Markl M, Ludwig U. Continuously Moving Table Venography and Arteriography. MR Angioclub 2010, Seoul, South Korea.
- Huff S, Markl M, Ludwig U. Peripheral arterial imaging with a Continuously Moving Table Time-of-Flight View-Sharing technique. Proceedings 18th Scientific Meeting ISMRM, Stockholm, Sweden, 2010.
- Huff S, Markl M, Ludwig U. Fast Vessel Scout Imaging based on Continuously Moving Table acquisitions of projection data. Proceedings 18th Scientific Meeting ISMRM, Stockholm, Sweden, 2010.
- Klausmann K, Ludwig U, Honal M, König D, Deibert P, Huff S. Accuracy of wholebody fat quantification with MRI: A comparison to Air-Displacement Plethysmography. Proceedings 18th Scientific Meeting ISMRM, Stockholm, Sweden, 2010.
- Han Y, Huff S, Hennig J, Ludwig U. A Novel Whole Body Diffusion Weighted Imaging Technique with Continuously Moving Table: Preliminary Results. Proceedings 18th Scientific Meeting ISMRM, Stockholm, Sweden, 2010.
- Ludwig U, Zaitsev M, Huff S. Continuously Moving Table MR Imaging at 3T: A comparison to 1.5T Proceedings 18th Scientific Meeting ISMRM, Stockholm, Sweden, 2010.
- Huff S, Honal M, Baumann T, Hennig J, Markl M, Ludwig U. Continuously Moving Table Time-of-Flight Angiography of the Peripheral Veins. Proceedings 17th Scientific Meeting ISMRM, Honolulu, Hawaii, USA, 2009, #128.
- Huff S, Honal M, Markl M, Ludwig U. View Sharing in slice direction for continuously moving table acquisitions: Application to TOF venography. Proceedings 17th Scientific Meeting ISMRM, Honolulu, Hawaii, USA, 2009, #3615.
- Honal M, Huff S. Efficient parallel imaging strategies for Time-of-Flight venography with continuously moving table. Proceedings 17th Scientific Meeting ISMRM, Honolulu, Hawaii, USA, 2009, #5454.
- Han Y, Huff S, Hennig J, Ludwig U. Multi-station Multi-sequence approach for whole-body diffusion-weighted imaging. Proceedings 17th Scientific Meeting ISMRM, Honolulu, Hawaii, USA, 2009, #3194.
- Huff S, Paul D, Honal M, Leupold J, Markl M, Ludwig U: Moving Table Time-of-Flight Venography. MR Angioclub 2008, Graz, Austria.
- Huff S, Paul D, Honal M, Leupold J, Markl M, Ludwig U: Axiale 2D Differenz-TOF-MR-Venographie mit kontinuierlich bewegtem Patiententisch; Proceedings 39th Scientific Meeting DGMP, Oldenburg, Germany, 2008.
- Huff S, Paul D, Markl M, Ludwig U: Axial 2D TOF-Venography with Continuously Moving Table Acquisitions; Proceedings Annual Meeting ISMRM, Toronto, Canada, 2008
- Huff S, Paul D, Markl M, Ludwig U: Axiale 2D TOF-Venographie mit kontinuierlich bewegtem Patiententisch; Proceedings Annual Meeting German Chapter of ISMRM, Würzburg, 2007
- Huff S, Laun FB, Stieltjes B, Schad LR: Entwicklung und Optimierung von DTI-Messtechniken mit richtungsangepassten b-Werten und deren Applikation am Rückenmark; Proceedings Annual Meeting German Chapter of ISMRM, Würzburg, 2007

- Huff S, Laun FB, Stieltjes B, Klein J, Hahn H, Schad LR: Optimized DTI for Fibre Bundles of Known Predominant Orientation ; Proceedings Joint Annual Meeting ISMRM/ESMRMB, Berlin, 2007
- Laun FB, Stieltjes B, Huff S, Schad LR: Investigations of a DTI-Phantom with Properties Similar to In Vivo Neuronal Tissue ; Proceedings Joint Annual Meeting ISMRM/ESMRMB, Berlin, 2007
- Huff S, Laun FB, Stieltjes B, Schad LR: Diffusion Tensor Imaging mit variablen b-Werten: Anwendung am Rückenmark; Proceedings Annual Meeting German Chapter of ISMRM, Jena, 2006

## Awards

- Travel stipend, MR Angioclub 2010, Seoul, South Korea
- Siemens Young Investigator Award, DGMP, 2008
- Best talk at the 10th Annual Meeting of the German Chapter of the ISMRM, Würzburg, 2007
- Finalist Gorter Award 2007

## CV

since 2007/07	Ph.D. Student in the group of Prof.Dr.Jürgen Hennig,Medical Physics, Department of Diagnostic Radiology, University Hospital Freiburg, Germany
2006/05 - 2007/05	Diploma thesis at the German Cancer Research Center Heidelberg in the group of Prof. Dr. Lothar Schad: "Entwicklung und Optimierung von DTI-Messtechniken mit richtungsangepassten b-Werten und deren Applikation am Rückenmark"
2002/10 - 2007/6	studies of physics at the RWTH Aachen, Germany