Curriculum Vitae

Personal Information		
Name	**Stephan A.R. Kannengiesser**	
Degree	**Dr.-Ing.** (equivalent to PhD)	
Country	**Germany**	
Affiliation	**Siemens Healthineers AG, Diagnostic Imaging, Magnetic Resonance, Erlangen, Germany**	

Educational Background

1996 – Diploma in Electrical Engineering, RWTH Aachen, Germany

1992/93 – Erasmus exchange program, Imperial College of Science, Technology and Medicine, London, UK.

2003 – Dr.-Ing. (Doctor of Engineering Sciences), RWTH Aachen, Germany

Graduated *summa cum laude*. Doctoral thesis: "Generalized Image Reconstruction for Magnetic Resonance Imaging".

Professional Career

1996-2002 – Research & Teaching Assistant, RWTH Aachen, Germany

Research periods at Washington University, St. Louis, MO, USA (1997, with E.M. Haacke, PhD) and Stanford University, Stanford, CA, USA (2000, with R.K. Butts Pauly, PhD, and J.M. Pauly, PhD).

Since 2002 – Application Developer & Technical Expert, Siemens Healthineers MR, Erlangen, Germany

"Principal Key Expert" for MR pre-development.

Product contributions to iPAT (parallel imaging: GRAPPA, CAIPIRINHA), TimCT (continuously moving table MRI), MR Elastography, LiverLab (Multi-Echo Dixon), Deep Resolve Gain (iterative denoising), and MR Fingerprinting.

Research Field

Quantitative MRI for Diffuse Liver Disease
Liver Fat and Iron Quantification
MR Elastography
MR Fingerprinting
Artifact Suppression
Image Denoising
SNR quantification
Parallel Imaging

Main Scientific Publications

As first author:

- Kannengiesser SAR, Wunderlich AP, Zhong X, *et al*. Liver R2* with magnitude fitting in iron-overload patients – initial results on agreement between protocol settings and between 1.5T and 3T. Proc ISMRM 2023.
- Kannengiesser SAR, Mailhe B, Nadar M, *et al*. Universal iterative denoising of complex-valued volumetric MR image data using supplementary information. Proc ISMRM 2016.
- Kannengiesser SAR, and Noll TG. Towards a Practical Generalized Image Reconstruction Method for MRI. Proc ISMRM 2002.
- Kannengiesser SAR, Pauly JM, and Butts RK. Fast Image Reconstruction for Sensitivity Encoded Spiral Imaging. Proc ISMRM 2001.
- Kannengiesser SA, Wang Y, and Haacke EM. Geometric distortion correction in gradient-echo imaging by use of dynamic time warping. Magn Reson Med 1999.

As co-author of numerous publications on parallel imaging, fat and iron quantification, MR Elastography, MR Fingerprinting, deep-learning reconstruction, and others:

- Fellner C, Nickel MD, Kannengiesser S, *et al*. Water-Fat Separated T1 Mapping in the Liver and Correlation to Hepatic Fat

Fraction. Diagnostics (Basel) 2023.

- Jhaveri KS, Kannengiesser SAR, Ward R, *et al*. Prospective Evaluation of an R2* Method for Assessing Liver Iron Concentration (LIC) Against FerriScan: Derivation of the Calibration Curve and Characterization of the Nature and Source of Uncertainty in the Relationship. J Magn Reson Imaging 2019.
- Zhong X, Nickel MD, Kannengiesser SAR, *et al*. Liver fat quantification using a multi-step adaptive fitting approach with multi-echo GRE imaging. Magn Reson Med 2014.