Stanford



Adam Kerr

Co-Director CNI / Sr Research Engineer, Electrical Engineering - Information Systems Laboratory

Bio

ACADEMIC APPOINTMENTS

- Co-Director CNI / Sr Research Engineer, Electrical Engineering - Information Systems Laboratory

ADMINISTRATIVE APPOINTMENTS

- Co-Director, Stanford Center for Cognitive and Neurobiological Imaging, (2017- present)

Publications

PUBLICATIONS

- **OPTIKS: Optimized Gradient Properties Through Timing in k-Space** *IEEE TRANSACTIONS ON MEDICAL IMAGING*
  McCready, M. A., Cao, X., Setsompop, K., Pauly, J. M., Kerr, A. B.
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- **A Dynamic Shim Approach for Correcting Eddy Current Effects in Diffusion-Prepared MRI Acquisition Using a Multi-Coil AC/DC Shim-Array.** *Magnetic resonance in medicine*
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  2026

- **In Vivo Meso-Scale Whole-Brain Quantitative Imaging With Tailored MRF on the NexGen 7T Scanner.** *Magnetic resonance in medicine*
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- **A new flexible coil setup to measure interleaved TMS-fMRI response during accelerated iTBS.** *Brain stimulation*
  Tik, M., Coetzee, J., Kerr, A., Johnson, N., Geoly, A., Sridhar, M., Hunegnaw, S. A., Veerapal, C., Rolle, C., Williams, N.
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- **Basis function compression for field probe monitoring.** *Magnetic resonance in medicine*
  Dubovan, P. I., Varela-Mattatall, G., Michael, E. S., Hennel, F., Menon, R. S., Pruessmann, K. P., Kerr, A. B., Baron, C. A.
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- **Spherical echo-planar time-resolved imaging (sEPTI) for rapid 3D quantitative T 2 * and susceptibility imaging.** *Magnetic resonance in medicine*
  Wang, N., Liao, C., Cao, X., Nishimura, M., Brackenier, Y. W., Yurt, M., Gao, M., Abraham, D., Alkan, C., Iyer, S. S., Zhou, Z., Jeong, H., Kerr, et al
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- **Limitations of 2-dimensional line-scan MRI for directly measuring neural activity.** *Imaging neuroscience (Cambridge, Mass.)*
  Wilson, J. M., Wu, H., Kerr, A. B., Wandell, B. A., Gardner, J. L.
  2024; 2

- **Rapid and accurate navigators for motion and B0 tracking using QUEEN: Quantitatively enhanced parameter estimation from navigators.** *Magnetic resonance in medicine*
  Brackenier, Y., Wang, N., Liao, C., Cao, X., Schauman, S., Yurt, M., Cordero-Grande, L., Malik, S. J., Kerr, A., Hajnal, J. V., Setsompop, K.
  2024
- **High-resolution myelin-water fraction and quantitative relaxation mapping using 3D ViSTa-MR fingerprinting.** *Magnetic resonance in medicine*
  Liao, C., Cao, X., Iyer, S. S., Schauman, S., Zhou, Z., Yan, X., Chen, Q., Li, Z., Wang, N., Gong, T., Wu, Z., He, H., Zhong, et al
  2023
- **High-resolution myelin-water fraction and quantitative relaxation mapping using 3D ViSTa-MR fingerprinting.** *ArXiv*
  Liao, C., Cao, X., Srinivasan Iyer, S., Schauman, S., Zhou, Z., Yan, X., Chen, Q., Li, Z., Wang, N., Gong, T., Wu, Z., He, H., Zhong, et al
  2023
- **DTI-MR fingerprinting for rapid high-resolution whole-brain T1 , T2 , proton density, ADC, and fractional anisotropy mapping.** *Magnetic resonance in medicine*
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  2023: 120168
- **Measuring brain beats: Cardiac-aligned fast functional magnetic resonance imaging signals.** *Human brain mapping*
  Hermes, D., Wu, H., Kerr, A. B., Wandell, B. A.
  2022
- **Convergence, preliminary findings and future directions across the four human connectome projects investigating mood and anxiety disorders.** *NeuroImage*
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- **Utilizing the Wavelet Transform's Structure in Compressed Sensing.** *Signal, image and video processing*
  Dwork, N., O'Connor, D., Baron, C. A., Johnson, E. M., Kerr, A. B., Pauly, J. M., Larson, P. E.
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- **MR susceptibility contrast imaging using a 2D simultaneous multi-slice gradient-echo sequence at 7T.** *PloS one*
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- **Advantages of short repetition time resting-state functional MRI enabled by simultaneous multi-slice imaging** *JOURNAL OF NEUROSCIENCE METHODS*
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- **Controlling Radiofrequency-Induced Currents in Guidewires Using Parallel Transmit** *MAGNETIC RESONANCE IN MEDICINE*
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