

Bonn-Cologne Computational Neuroscience Seminar

Optically Pumped Magnetometers: promises and pitfalls

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Talk Abstract

Optically pumped magnetometers have emerged as a viable alternative to cryogenic MEG systems for non-invasive neurophysiology. They promise to bring improved spatial resolution and SNR while enabling exciting new experiments that were not feasible with traditional MEG systems. However, there is no such thing as a free lunch. Achieving better SNR and spatial resolution requires careful consideration of sensor hardware, array design and interference mitigation.

Throughout this talk I will review the work that has been done to help deliver on these promises. This will include the improvements to sensor design and magnetic shielding as well as the algorithms for modelling brain signal and interference.

I will also cover our neuroscientific work to enable studies of language, imagination and memory, spinal neurophysiology and epilepsy.

Friday, 5 May 2023, 12 pm

In-Person:

University of Bonn Medical Center
Venusberg Campus 1,
Lehrgebäude (Gebäude A 10), Seminarroom 11 (A010.2.04)

[Direction](#)

Online:

<https://uni-bonn.zoom.us/j/62321512510?pwd=ZC9SMdDdBRGoxQ1ZLamwvYjZBc0pXUT09>

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Host

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