

## Preliminary Program of confirmed speakers

(will be fully published on the website as soon as conflict of interest statements are collected)

### DAY 1 - Monday March 31 2025 - UHF and fMRI combined

#### 8:50: Chairs' opening/welcome:

Marta Bianciardi,  
Patricia Figueiredo,  
Jun Hua,  
Laurentius Huber,

#### 09:00: Keynote

- Overview of UHF-fMRI, (Seong-Gi Kim)

#### 10:00: Challenges & Prospects in UHF-fMRI

- Hardware (David Feinberg)
- Sequences (Jonas Bause)
- Pre-processing (Yulia Lazarova)
- Preclinical (Ian Shih)

#### 11:30: SNR to burn

- High spatial resolution (Luca Vizioli)
- High temporal resolution (Saskia Bollmann)
- Weak non-BOLD contrasts (Dimo Ivanov)

#### 14:00: Applications

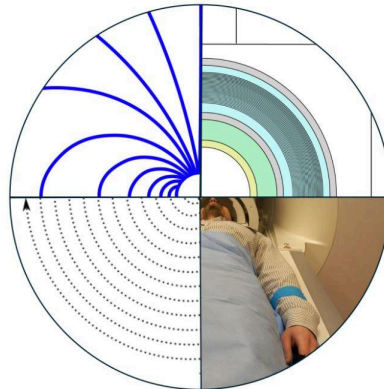
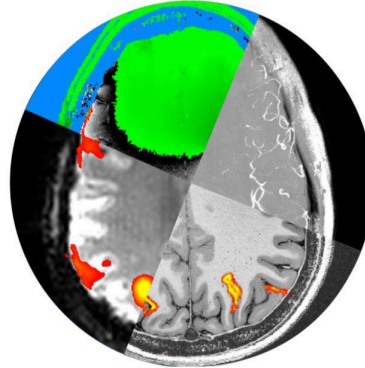
- Cognitive/clinical neuroscience (Rainer Goebell)
- Translational (Birte Forstmann)
- Connectivity (Anna Roe)
- Physiology (Kaisu Lankinen)

#### 15:30: Vendors

#### 16:15: Proffered talks

#### 17:00: Keynote, future of BF @ UHF

- Future of fMRI at UHF (Jonathan Polimeni)



## DAY 2 - Tuesday April 1 - fMRI track

### 9:00: fMRI Signal Mechanisms & Biophysics

- Neurovascular coupling & calibrated fMRI (Natalia Petridou)
- The eternal fight of the best layer-fMRI contrast (Nikos Privovoulos)
- Leveraging the phase in fMRI (Ravi Menon)

### 10:00: fMRI non-neuronal signals

- CSF fluctuations in fMRI (Laura Lewis)
- Physiological signals in fMRI (Pinar Ozbay)
- Functional MRS - fMRI (Paul Mullins)

### 11:30: Noise / analysis

- challenges of UHF fMRI for the masses (Paul Taylor)
- physiological signals in fMRI - denoising (Stefano Moia)
- Multi-echo in clinics, Why using it and what does it give you (fMRI in clinics) (Charles Lynch)

### 13:30: Poster reception

### 15:00: Proffered talks

### 16:00: We, the fMRI field:

#### Panel discussion hosted by Peter Bandettini:

- fMRI developer: scanner janitor vs. researcher (Ravi Menon, Rainer Goebel)
- Industry vs. research (Prantik Kundu)

### 17:00: fMRI across species

- What we learn from animals that we cannot learn from humans (Jozien Goense)
- Sedation and other confounds in preclinical fMRI (Francesca Mandino)"

19:00 Social event

---

## DAY 2 - Tuesday April 1 - UHF track

### 9:00: Keynotes

- Plenary on UHF MRI at CMRR (Kamil Ugurbil)
- Plenary on UHF MRI at MGH (Larry Wald)

### 10:00: UHF MRI system development

- Head coil design and development (Ozlem Ipek)
- Hardware and methods for B0 shimming and flexible spatial encoding at UHF (Jason Stockmann)
- Slice-selective pTx pulse design (Minghao Zhang)
- Development of an UHF Body Coil (Simone Winkler)

### 11:30: Acquisition and analysis at UHF

- MRS/X nuclei (Anke Henning)
- Recent advances in Metabolic Imaging at Ultra-high Field (Reddy Ravinder)
- High-resolution QSM and functional QSM at UHF (Sina Straub)
- Ultra-High Resolution Quantitative MRI Mapping of the Human Subcortex (Evgeniya Kirilina)

### 13:30: Poster reception

### 15:00: Proffered talks

### 16:00: Safety at UHF

- Pediatric neuro (Shaihan Malik)
- Safe MRI of DBS Patients at UHF: Potentials, Challenges, and Strategies (Alireza Sadeghi-Tarakame)
- SAR Modelling for RF Safety at UHF (Aurelien Destruel)
- MR Thermometry for RF Safety at UHF (Caroline Le Ster)"

### 17:00: Vendor talks/breakout/fireside chat

- EUFIND
- UK7T
- 7TANA
- GUF1

19:00 Social event

---

## DAY 2 - Tuesday April 2 - fMRI track

### 9:00: **Hardware / acquisition**

- fMRI in infants at 7T: challenges and opportunities (Essa Yacoub)
- recent advancements of the workhorse (Caroline Le Ster)
- EPTI for fMRI (Fuyixue Wang)"

### 10:00: **Deep sampling and precision mapping**

- Precision mapping (Evan Gordon)
- The ABCD study (Angie Laird)
- Precision mapping at high spatiotemporal resolutions (Anna Blazejewska)

### 11:30 **Proffered talks**

### 12:30: **Keynote**

- From the Beginning: What I Saw and Learned in the Land of fMRI (Bob Cox)

### 13:30 Combined closing with awards

## DAY 2 - Tuesday April 2 - UHF track

### 9:00: **Keynotes**

- Plenary on body (Tom Scheenen)
- Plenary on brain (Erik Middlebrooks)

### 10:00: **UHF Applications, neuro**

- Clinical Applications of Ultra-High Field Vascular Imaging (Anja van der Kolk)
- Clinical Applications of Ultra-High Field Metabolic Imaging (Daniel Peach)
- Clinical Applications of Ultra-High Field Pediatric Imaging (Jon Cleary)
- Clinical Applications of Ultra-High Field Spine Imaging (Anna Combes)

### 11:30: **UHF Applications, body**

- Compartment-based reconstruction of 3D acquisition-weighted 31 P cardiac magnetic resonance spectroscopic imaging at 7 Tesla (Andrew Tyler)
- QSM for epiphyseal cartilage vascularity and short echo time imaging for bone healing at UHF (Abdul Wahed Kajabi)
- RF hardware development for human extremity imaging at 7 Tesla (Xiaoliang Zhang)
- Quantitative Abdominal Sodium imaging at 7 Tesla in a large FOV (Anna Scheipers)

### 12:30: **UHF MR Technology Development**

- Whole body MRI at 5 Tesla (Chao Zhou)
- Perfusion MRI at 7 Tesla (Danny Wang)
- 7 Tesla pTx in the human body (Sebastian Schmitter)
- Recent Development of the 11.74 Tesla Human Scanner (Nicolas Boulant)

### 13:30 Combined closing with awards