

# wopm

10<sup>th</sup> Workshop on Optically Pumped Magnetometers



28 AUGUST - 29 SEPTEMBER  
2022



UNIVERSITY OF  
BIRMINGHAM

Satellite meeting for BIOMAG 2022  
UNIVERSITY OF BIRMINGHAM,  
UK

[opm-workshop.org](http://opm-workshop.org)

**MEGIN**



**UK National  
Quantum Technology Hub**  
in Sensors and Metrology

## WOPM 2022 Social schedule

Saturday 27 <sup>th</sup> of August	
17:00 – 18:00	Registration and welcome drinks
18:00 – 22:00	Dinner at Edgbaston Park Hotel
Sunday 28 <sup>th</sup> of August	
09:00 – 18:00	WOPM session (hybrid)
17:00 – 18:30	Opening Ceremony and reception, Great Hall (in-person only)
18:30 – 20:30	BBQ poster session at Edgbaston Park Hotel
Monday 29 <sup>th</sup> of August	
09:00 – 10:30	WOPM session (hybrid)

### Where:

On weekends 27<sup>th</sup>-28<sup>th</sup> of August:

Edgbaston Park Hotel  
Birmingham  
B15 2RS

On arrival, please go to the registration desk, next to the main hotel reception to collect your badge and to be advised which meeting room you need to go to.

On Monday 29<sup>th</sup> of August:

Great Hall, University of Birmingham  
Birmingham  
B15 2RS

You can use our interactive campus map or download a pdf copy [here](#). The Great Hall is marked R6 in the red zone on our campus map

# WOPM 2022 Programme of Talks

## Sunday 28<sup>th</sup> August

9.00-9.10	Welcome	
9.10-9.40	<b>Svenja Knappe</b>	<b>Towards a commercial high-density full-head OPM-MEG system</b>
9.40-10.00	Vishal Shah	Hybrid Scalar-Triaxial Atomic Magnetometer
10.00-10.20	Niall Holmes	The matrix coil: reconfigurable active shielding
10.20-10.40	Yu Zheng	A preliminary study of magnetic field noise suppression method towards the moving magnetoencephalography
10.40-11.00	Rachel Dawson	Compact Portable SERF Sensor for MEG
11.00-11.30	Coffee Break	
11.30-12.00	<b>Thomas Coussens</b>	<b>Open circuit current density imaging of lithium-ion batteries using SERF OPMs</b>
12.00-12.20	Katrijn Everaert	A tabletop Optically Pumped Magnetometer setup for the monitoring of magnetic nanoparticle clustering with Thermal Noise Magnetometry
12.20-12.40	Michael Tayler	Mass-producible miniature atomic vapor sensors
12.40-13.00	Rujie Li	Enhancing the sensitivity of an NMOR magnetometer
13.00-15.00	Lunch and Posters	
15.00-15.30	<b>Benjamin Maddox</b>	<b>Electromagnetic Induction Imaging with Atomic Magnetometers in Real-World Scenarios</b>
15.30-15.50	Philipp Rößner	A highly drift-stable atomic magnetometer for fundamental physics experiments
15.50-16.10	Allan McWilliam	Accurate and precise magnetometry using Cs MEMS cells using a dual-beam configuration
16.10-16.40	Coffee Break	
16.40-17.00	Thanmay Menon	Rabi Vector Magnetometry Implemented with Hot Alkali Vapor
17.00-17.20	Siqi Liu	Low-temperature compact atomic vector magnetometer for highly sensitive and stable weak field detection
17.20-17.40	Yongqi Shi	Atomic vapor cell-based microwave spectrum analyzer with 1GHz instantaneous analysis bandwidth

All times are British Summer Time (BST)

# WOPM 2022 Programme of Talks

## Monday 29<sup>th</sup> August

8.30-9.00	Etienne Labyt	Towards a whole head Helium OPM MEG system
9.00-9.20	Sarang Dalal	Fetal visual evoked responses measured with OPMs
9.20-9.40	Amaia Benitez Andonegui	OPM dynamic field compensation for evoked responses
9.40-10.00	Xu Wang	A study of alpha rhythm and sensorimotor cortex responses using optically-pumped magnetometers (OPMs)
10.00-10.20	Yulia Bezsudnova	Simulation Study of the performance of an OPM-MEG system in realistic conditions

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