



## **WILHELM AND ELSE HERAEUS SYMPOSIUM FOR BREAKTHROUGHS IN PHYSICAL SCIENCES**

8 NOV 2023

PRELIMINARY PROGRAMME

8.30 – 9.00 am

**FALLING WALLS CIRCLE: JOINT OPENING SESSION**

9.00 – 9.15 am

**OPENING SYMPOSIUM**

**Thomas Elsässer**, Max Born Institute

**Oliver Benson**, Humboldt University Berlin

**Stefan Jorda**, Wilhelm and Else Heraeus Foundation

9.15 – 10.45 am

**WINNER PITCHES**

**Libor Šmejkal**, Johannes Gutenberg University Mainz, Magnetic Quantum Matter

**Keshav Dani**, Okinawa Institute of Science and Technology, Graduate University,  
Imaging the momentum-forbidden dark excitons

**Valentina Emiliani**, Vision Institute, CNRS, Intact brain manipulation at cellular  
resolution

**Leo Gross**, IBM Research Europe – Zurich, Resolving single molecules

**Thomas Klinger**, Max Planck Institute for Plasma Physics

**Vivek Polshettiwar**, Tata Institute of Fundamental Research (TIFR), Mumbai,  
Achieving CO<sub>2</sub> Net Zero Using Black Gold

**Arne Thomas**, Technische Universität Berlin, Storing the Energy of Sunlight

**Amran Al-Ashouri**, Helmholtz-Zentrum Berlin, Limitation of the electricity  
generation from sunlight

10.45 – 11.00 am

*coffee break*

11.00 – 11.30 am

**NEXT GENERATION RESEARCHER PITCHES**

**Laura König-Mattern**

**Conor Crawford**

**Atreyee Banerjee**

**Poonam Singh**

**David Kulla**

11.30 – 12.20 pm

**SPEAKER CORNERS**

1. Quantum excitations and information

2. Light and imaging

3. Energy and environment

12.20 – 12.50 pm

**DISCUSSION**

12.50 – 1.00 pm

**WRAP UP**

**RECOMMENDED AFTERNOON EVENTS**

2.00 – 3.00 pm

**PLENARY TABLE: Solar Energy**

supported by HZB

4.00 – 5.00 pm

**PLENARY TABLE: QUANTUM**

supported by Quantum Valley Lower Saxony

6.00 pm

**FALLING WALLS EVENING RECEPTION**