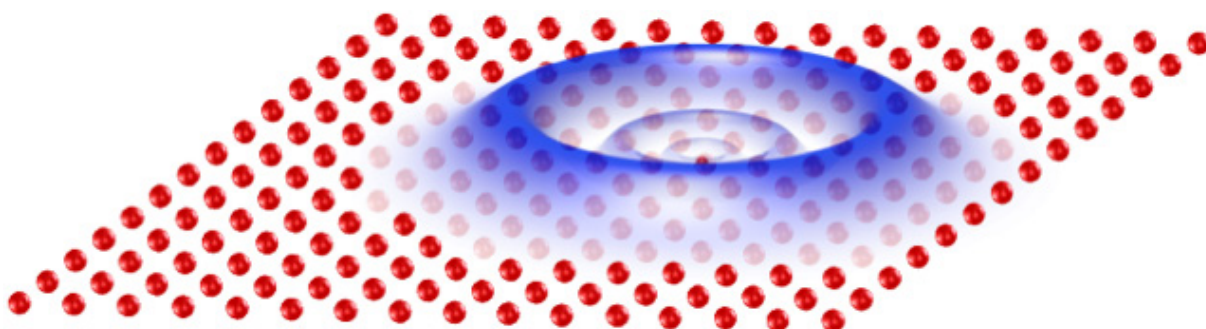


5th International Workshop  
on  
**RYDBERG EXCITONS IN SEMICONDUCTORS**  
10-12 MAY 2022



Scientific coordinators:

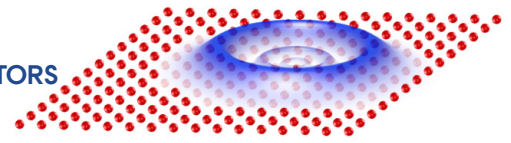
- Thomas Pohl, DK
- Richard Schmidt, DK
- Stefan Scheel, DE
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- Matthew P.A. Jones, UK

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**TUESDAY 10 MAY**

09:00 - 09:30	ARRIVAL AND REGISTRATION
<b>09:30 - 09:40</b>	<b>OPENING</b>
09:40 - 10:20	<b>Hamid Ohadi</b> (University of St. Andrews) <i>Rydberg polaritons in a Cu<sub>2</sub>O microcavity</i>
10:20 - 11:00	<b>Ajit Srivastava</b> (Emory University) <i>Interacting Excitons and Electrons in vdW Heterostructures</i>
<b>11:00 - 11:20</b>	<b>COFFEE BREAK</b>
11:20 - 12:00	<b>Stephen Lynch</b> (Cardiff University) <i>Unlocking the Potential of Cuprous Oxide for Quantum Technologies</i>
12:00 - 12:20	<b>Katharina Brägelmann</b> (Technical University of Dortmund) <i>Neutralisation of detrimental effects on the Rydberg exciton absorption spectrum</i>
<b>12:20 - 14:20</b>	<b>LUNCH</b>
14:20 - 15:00	<b>Jörg Main</b> (University of Stuttgart) <i>Semiclassical approaches to Rydberg excitons in cuprous oxide</i>
15:00 - 15:40	<b>Dirk Semkat</b> (University of Greifswald) <i>Electron-hole plasma influence on Rydberg excitons: Consequences for the interpretation of measurements</i>
<b>15:40 - 16:10</b>	<b>COFFEE BREAK</b>
16:10 - 16:50	<b>Sylvia Zielińska-Raczyńska</b> (Bydgoszcz University of Science and Technology) <i>Rydberg excitons in nanoscale Cu<sub>2</sub>O systems</i>
16:50 - 17:10	<b>Florian Morawetz</b> (University of Rostock) <i>Towards calculating Rydberg excitons in quantum wells</i>
17:10 - 17:50	<b>Liam Gallagher</b> (University of Durham) <i>Microwave-optical coupling via Rydberg excitons in Cu<sub>2</sub>O</i>
<b>18:00 -</b>	<b>DINNER</b>
<b>19:00 -</b>	<b>POSTER + DRINKS</b>



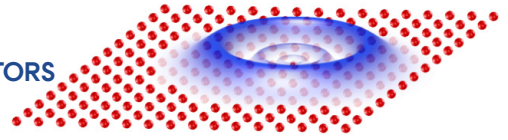
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**WEDNESDAY 11 MAY**

- 09:20 - 10:00 **Tomasz Smoleński** (ETH, Zürich)  
*Optical sensing of strongly correlated electronic states in atomically-thin materials*
- 10:00 - 10:40 **Georg Bruun** (Aarhus University)  
*Light-induced topological superconductivity in transition metal dichalcogenide monolayers*
- 10:40 - 11:00** **COFFEE BREAK**
- 11:00 - 11:40 **Chun Hung Lui** (University of California, Riverside)  
*Optical spectroscopy of novel excitonic states in 2D semiconductors and moiré superlattices*
- 11:40 - 12:00 **Jan Ertl** (University of Stuttgart)  
*Signatures of Exciton Orbits in Quantum Mechanical Recurrence Spectra of Cuprous Oxide*
- 12:00 - 14:20** **LUNCH**
- 14:20 - 15:00 **Armando Genco** (The Polytechnic University of Milan)  
*Rydberg excitons dynamics and interacting dipolar excitons and polaritons in atomically thin semiconductors*
- 15:00 - 15:40 **Valentin Walther** (Harvard University)  
*The route to quantum light via semiconductor excitons*
- 15:40 - 16:10** **COFFEE BREAK**
- 16:10 - 16:50 **Na Young Kim** (University of Waterloo)  
*Temperature Study of Rydberg Excitons in Cu<sub>2</sub>O*
- 16:50 - 17:30 **Hadiseh Alaeian** (Purdue University)  
*From Dipolar to Rydberg Photonics: Harnessing Atom-Atom Interactions*
- 17:30 - 17:50 **Karol Karpinski** (Bydgoszcz University of Science and Technology)  
*Magneto-optical properties of low dimensional Rydberg systems*
- 18:30 -** **CONFERENCE DINNER**



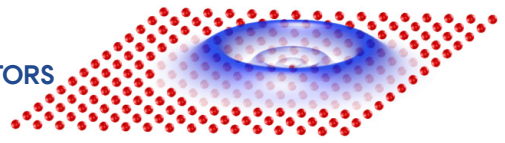
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**THURSDAY 12 MAY**

- 09:20 - 10:00      **Stephan Steinhauer** (KTH Royal Institute of Technology, Stockholm)  
*Recent advances on the growth of mesoscale Cu<sub>2</sub>O and the spectroscopic characterization of Rydberg exciton states*
- 10:00 - 10:40      **Arturo Camacho Guardian** (National Autonomous University of Mexico)  
*Moiré-induced non-linearities: From multi-photon resonances to translational symmetry breaking in driven-dissipative moiré systems*
- 10:40 - 11:00**      **COFFEE BREAK**
- 11:00 - 11:40      **Thomas Boulier** (Laboratoire de Physique de l'Ecole Normale Supérieure, (LPENS), Paris)  
*Self-Kerr effect in the Cu<sub>2</sub>O Yellow Rydberg series*
- 11:40 - 12:20      **Marc Aßmann** (Technical University of Dortmund)  
*Rydberg exciton impurity interactions*
- 12:20 - 14:20**      **LUNCH**
- 14:20 -**              **LABTOURS & DISCUSSIONS**



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