Munich Quantum Valley

Quantum Computing Meets Quantum Chemistry

14 – 15 June 2022 at Institute for Advanced Study, Munich-Garching

Day Two – June 15, 2022

Session 3	
02:40 - 03:20 p.m.	**Michael Marthaler, HQS Quantum Simulations GmbH** "Simulating open quantum systems with quantum computers"
03:20 - 04:00 p.m.	**Giulia Galli, University of Chicago** (virtually) "Embedding theories for quantum simulations on hybrid classical-quantum architectures"
04:00 - 04:30 p.m.	BREAK

Session 4	
04:30 - 05:10 p.m.	**Kristel Michielsen, Forschungszentrum Jülich** "Emulation of quantum computation of molecular energies using VQE on high-performance computers"
05:10 - 05:50 p.m.	**Martin Head-Gordon, University of California Berkeley** (virtually) "Nonorthogonal configuration interaction for strong electron correlations: General considerations and a nonorthogonal quantum eigensolver"
05:50 - 06:30 p.m.	**Mario Motta, IBM, CA** (virtually) "Tackling the electronic structure problem on near-term quantum devices: algorithmic improvements and error mitigation techniques"
06:30 - 07:00 p.m.	**Closing Session – Wrap Up**

Time (CEST)