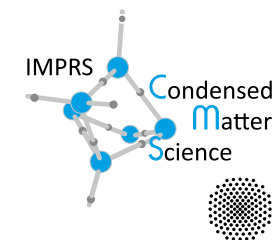


# Program of Summer School of the IMPRS-CMS & MPI-UBC-UTokyo Center for Quantum Materials

## Design and Synthesis of Quantum Materials

Time Zones			Monday Sep 28, 2020	Tuesday Sep 29, 2020	Wednesday Sep 30, 2020	Thursday Oct 1, 2020	Friday Oct 2, 2020
Stuttgart	Vancouver	Tokyo		08:00 - 8:30 Online Discussion W. Zeier		Online Discussion & Poster A. Fujimori & K. Zou Tokyo	Online Discussion A. Fujimori & M. Dressel Tokyo
08:00	23:00	15:00					
09:00	00:00	16:00	09:00 Login 09:30 Prof. Bernhard Keimer 09:40 Dr. Eva Benckiser	Poster Tokyo	Online Discussion & Poster J. Maier Tokyo	Student Prize Talks Tokyo *	
10:00	01:00	17:00	Soft Chemical Synthesis Routes to Novel Quantum Materials Michael A. Hayward (U Oxford) *	High Pressure Synthesis of Quantum Materials J. Paul Attfield (U Edinburgh) *	Recent Advances in the Synthesis of Mixed-Anion Compounds Hiroshi Kageyama (U Kyoto) *	Molecular Quantum Materials Martin Dressel (U Stuttgart) *	
11:00	02:00	18:00					
12:00	03:00	19:00	Student Presentations Tokyo *	tba "live only" Matthew Rosseinsky (U Liverpool) *	Break	Break	
13:00	04:00	20:00	Break				
14:00	05:00	21:00	Structure – Bonding Interactions in Functional Materials Wolfgang Zeier (U Gießen) *	Break 14:30 / 05:30 / 21:30 Ion Transport and the Role of Defects Joachim Maier (MPI-FKF) *	Material Trends in the Chemical Bonding and Electronic Structure of Quantum Materials Atsushi Fujimori (U Tokyo) *	Linking Structural Distortions to Functional Properties in Complex Oxides: Insights from Theory and Simulation Nicole A. Benedek (U Cornell) *	Lab Videos & Barbecue (MPI Canteen)
15:00	06:00	22:00					Closing Remarks
16:00	07:00	23:00	Student Presentations Vancouver *	Break	Online Discussion J. Maier & J. P. Attfield Vancouver	Online Discussion H. Kageyama & M. Dressel Vancouver	
17:00	08:00	00:00	Break	Online Discussion M. A. Hayward Vancouver	Student Prize Talks Vancouver *	Break	
18:00	09:00	01:00	tba Arthur P. Ramirez (UC Santa Cruz)	Quantum Materials Discovery with Metallic Flux Growth Alannah Hallas (UBC)	Two-dimensional Fe-based Superconductors and Ferro- magnetic Materials Grown by Molecular Beam Epitaxy Ke Zou (UBC)	tba Curtis Berlinguette (UBC)	
19:00	10:00	02:00					



### Events in 2D5 (max. 50 pers.)

- \* Lecture
- \* Public Viewing
- Virtual only

Synthesis

Characterisation

Rational Design

Student Contributions

