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

Sep 28 – Oct 2, 2020

# **Design and Synthesis of Quantum Materials**

#### Scope

Quantum phenomena offer great opportunities for applications in information and clean energy technology, including the realisation of quantum computers and novel solar cells. The rational design and synthesis of materials that host such phenomena are therefore at the forefront of solid state research. The aim of this Summer School is to bring interdisciplinary research experts in the field of quantum materials together with young researchers at the Max Plank Institute, the University of British Columbia, and the University of Tokyo.

#### **Student Contribution**

Students have the opportunity to present their own work as a virtual poster, which is advertised beforehand in a short 3-minute talk. The best contributions will receive a 15 min talk on Thursday.

To receive a certificate of attendance, a poster contribution is mandatory. Please register before Sep 23, 2020

In addition, the students have the opportunity to offer virtual laboratory tours in the form of short videos, which are presented in a separate session at the end of the school. Deadline: Sep 23, 2020

### **Topics**

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Condensed Matter

cience

Soft chemistry Defects and ionic conductivity (High-pressure) synthesis Spectroscopy Structural characterisation Thermodynamics Thin films Chemical bonding / Material trends Ab-initio theory

# Location

The summer school is taking place ONLINE.

on the website! It is planned that lectures are viewed together on the MPI campus. Please find updated information on our website.

www.imprs-cms.mpg.de



## Registration

Please register at www.imprs-cms.mpg.de/ summerschool2020

#### Confirmed **Invited Speakers**

J. Paul Attfield

Virtuelly hosted by Research Wirtuelly hosted by Research MPI for Solid State Research

**Curtis Berlinguette** University of British Columbia

Atsushi Fujimori

**Alannah Hallas** University of British Columbia

Michael A. Hayward Oxford University

**Joachim Maier** MPI for Solid State Research Stuttgart

Arthur P. Ramirez University of California Santa Cruz

Matthew Rosseinsky University Liverpool

Hiroshi Kageyama **Kyoto University** 

Wolfgang Zeier Justus-Liebig University Gießen

Ke Zou University of British Columbia