



## Workshop on Studying Strongly Correlated Materials with High Pressures

This workshop will introduce researchers, post-graduate students and students to methods and techniques for studying, magnetism, superconductivity, dielectric properties and electrical properties using clamp-type and anvil-type pressure apparatus. This will be further augmented by an introduction to x-ray and neutron methods to study relationships between structural and magnetic properties of materials.

***Primary Language will be English.***

### Lecturers:

**Dr Siddharth S Saxena**, Cavendish Laboratory, University of Cambridge & NUST MISIS, Laboratory for Superconducting Metamaterials

**Dr Hayrullo Hamidov**, Cavendish Laboratory, University of Cambridge & NUST MISIS, Laboratory for Superconducting Metamaterials

**Venue: MISIS Main Building, Professors' Club at 13<sup>th</sup> floor**

### Schedule:

15:00 Introduction to the Physics of Pressure Tuneable Quantum Phases

Introduction to High- Pressure method and Typology of Equipment

### **16:00 Instructions on Use of Variety of Piston-Cylinder Cells**

17:00 Coffee Break

17:30 Introduction to Pressure Studies of Crystallographic Transformation

18:00 Introduction Neutron's and Synchrotron study of Pressure Driven Phase Transitions

19:00 Panel Discussion and Q&A

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