



# 核科学与技术学院

School of Nuclear Science and Technology, UCAS

## 中国科学院大学高能核物理前沿讲座



- **Understanding hadrons near the QCD cross over**

- **Speaker: Prof. Sourendu Gupta**

**印度科学院、国家科学院院士**

**TIFR (Tata Institute of Fundamental Research)**

**Host: Prof. Mei Huang**

**Time: 14:00pm-15:30pm, Nov. 24<sup>th</sup>, 2025**

**Place: Room 121, Teaching 2, Yanqi Campus**

**雁栖湖校区东区 教2-121**

**Abstract:** The properties of strongly interacting matter made of hadrons change very rapidly near the QCD cross over. This has been studied numerically using the methods of lattice gauge theory, and much is known about the thermodynamics of this matter. However, lattice methods have difficulty answering questions about departures from equilibrium. An effective field theory can now be used to address both the equilibrium and departure from equilibrium. This begins to give a complex picture of hadrons near the cross over.

**Speaker:** Prof. Sourendu Gupta is a member of the International Center for Theoretical Sciences, Tata Institute of Fundamental Research. His interest is in quantum field theory at high temperature and density. He did his doctoral work in the Tata Institute and post-doctoral research in the University of Bielefeld, CERN, and KFA Juelich before joining the Tata Institute as faculty. He is a member of Indian Academy of Sciences and the Indian National Science Academy