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ICTS Astrophysics & Relativity Seminar (Online)

Title : Extreme magnetic fields around black hole accretion

Speaker : Koushik Chatterjee (University of Maryland)

Date : Thursday, 18th January 2024

Time : 03:30 PM (IST)

Abstract : Recent results of the event horizon-scale images of M87* and Sagittarius A* from the Event Horizon Telescope Collaboration show that strong magnetic fields are likely present around the central black holes in these sources. Magnetically arrested disks (MADs), the end stage of magnetic flux saturation around black holes, are especially rich in horizon-scale physics due to the presence of powerful jets and magnetic flux eruptions that provide significant feedback on the accretion mechanism. I will provide an overview of our current knowledge about the magnetic field evolution in numerical simulations of accreting black holes, focusing on relativistic jet launching, black hole-ISM feedback, and black hole imaging of MADs.

Venue : Please click on the below link to join the seminar

<https://icts-res-in.zoom.us/j/98558263180?pwd=TVlibkZObFBhMEx3cEhmTGpsbVILUT09>

Meeting ID: 985 5826 3180

Passcode: 181819