



ICTS Geometry and Physical Mathematics Seminar

Title : The image of the Hitchin morphism and the Chen-Ng^o conjecture

Speaker : Aryaman Patel (Saarland University, Germany)

Date : Thursday, 12 February 2026

Time : 4:00 PM (IST)

Abstract : We study the Hitchin morphism for higher dimensional varieties and show that, for a certain class of varieties which we call *slightly positive*, the image of the Hitchin morphism from the Dolbeault moduli space coincides with the spectral base. In other words, a stronger version of the conjecture of Chen and Ng^o holds for slightly positive varieties. As a special case, we show that this stronger version of the conjecture holds for any projective Hyperkähler variety. As part of the proof, we modify the construction of spectral covers. We also show that the spectral base is irreducible for a large class of varieties that includes slightly positive varieties, and that Chen-Ng^o's conjecture is equivalent to the birational invariance of the image of the Hitchin morphism.

Venue : Chern Lecture Hall

Zoom Link: <https://icts-res-in.zoom.us/j/98085713375?pwd=xrlQc9bbF5wwxgB2LcalQpAnC4n6lg.1>

Meeting ID: 980 8571 3375

Passcode: 302010