



Theoretical Statistics and Mathematics Unit, Kolkata
INDIAN STATISTICAL INSTITUTE

SEMINAR

Date: February 19, 2025

Time: 03:30 PM

VENUE:

L - 2

(4th Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

TITLE:

**Towards generalized complex structures and its associated
principal bundle theory**

SPEAKER:

Debjit Pal

Stat-Math Unit, ISI Kolkata

ABSTRACT:

Generalized complex (GC) geometry, introduced by Hitchin and developed by Gualtieri, unifies complex and symplectic geometry as its extremal special cases. A natural question is to provide a suitable bundle theory in this context. In this talk, I will begin with an introduction to GC manifolds and talk about strong generalized holomorphic (SGH) principal bundles and associated connection and curvature theories. In essence, these bundles are holomorphic in complex geometry and flat symplectic bundles in symplectic geometry. Also, if time allows, I will discuss some related examples.

ALL ARE CORDIALLY INVITED