



INDIAN STATISTICAL INSTITUTE
Theoretical Statistics and Mathematics Unit, Kolkata

LECTURE

Date: January 11, 2023, Wednesday
Time: 03:00 PM

VENUE:

L-infinity

(5th Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

TITLE:

Some Structures on Principal Lie 2-group Bundles over Lie groupoid

SPEAKER:

Praphulla Koushik

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ABSTRACT:

There are several equivalent ways to define the notion of connection on a principal Lie group bundle over a manifold. One such definition involves the splitting of the so called Atiyah sequence. For a principal bundle E over M , the Atiyah sequence is a short exact sequence of vector bundles over the manifold M . Motivated by this idea, we define the notion of a Atiyah sequence for a principal Lie 2-group bundle over a Lie groupoid. Using that, we define some geometric structures on principal Lie 2-group bundles over Lie groupoid.

This is based on a joint work with Saikat Chatterjee and Aditya Chaudhuri.

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