



INDIAN STATISTICAL INSTITUTE

Theoretical Statistics and Mathematics Unit, Kolkata

SEMINAR

Date: April 17, 2024

Time: 02:30 PM

MODE: Online

Link: <https://meet.google.com/hui-vqtz-qqr>

TITLE:

Complex structures and connections on noncommutative differential calculus

SPEAKER:

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ABSTRACT:

We introduce the notion of noncommutative differential calculus on a (possibly noncommutative) algebra B which generalizes the algebra of differential forms on an ordinary manifold. We will be mainly interested in the cases when our differential calculi will be equipped with a coaction of a Hopf $$ -algebra. We will review the definition of noncommutative complex structures and Hermitian metrics from the literature. We will conclude with the existence and uniqueness of Chern connections on holomorphic bimodules.*

ALL ARE CORDIALLY INVITED