Theoretical Statistics and Mathematics Unit

Indian Statistical Institute

203 B.T. Road, Kolkata - 700108

SEMINAR

Date: November 19, 2026
Time: 04:15 PM

VENUE:

L-2, 4th Floor, A.N. Kolmogorov Bhavan, ISI Kolkata

SPEAKER:

Samya Kumar Ray

IMSc, Chennai

TITLE:

Rational dilation problem

ABSTRACT:

In this talk, we discuss the rational dilation problem on domains in C^n. Among the various approaches to this problem, we focus on techniques from operator space theory, highlighting the connection between rational dilation and complete contractivity. En route, we discuss the case when the domain is a unit ball. We determine the cotangent operator space structure at the origin of the tetrablock and use it to construct a commuting triple of operators for which the tetrablock is a spectral set but not a complete spectral set, thereby establishing the failure of rational dilation on the tetrablock.

Stat Math Unit, ISI Kolkata

ALL ARE CORDIALLY INVITED

Click here for More Seminar Information