

Title

**Speaker** 

Date

Time

TATA INSTITUTE OF FUNDAMENTAL RESEARCH **ICTS Seminar** Stochastic Nash evolution Govind Menon (Brown University, USA) Wednesday, 20 March 2024 : 04:00 PM (IST)

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CENTRE *for* Theoretical

Abstract The embedding problem for Riemannian manifolds was solved by Nash in the 1950s. In the past decade, these theorems have reappeared unexpectedly in several apparently unrelated scientific contexts, in particular machine learning and turbulence, stimulating a renewed investigation of the problem.

> I will describe a new framework for the analysis of Nash's work that is based on information theory. This framework builds on the embedding-turbulence analogy to provide new algorithms, new models and new theorems for many applications. The foundation is a probabilistic characterization of the isometric embedding problem obtained with Dominik Inauen (Leipzig).

The main goal of this talk is to sketch relationships between different problems previously thought to be distinct. We will illustrate representative ideas and examples.

## Venue Madhava Lecture Hall

Please click on the below link to join the seminar

https://icts-res-in.zoom.us/j/96069119069?pwd=TTYwUmpzRUJjTnFmSDZXOWRacm0zZz09 Meeting ID: 960 6911 9069

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