



INDIAN STATISTICAL INSTITUTE

Theoretical Statistics and Mathematics Unit, Kolkata

SEMINAR

Date: June 06, 2024

Time: 03:00 PM

VENUE:

L- infinity

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

TITLE:

On The Nontriviality Of The Russell Cubic

SPEAKER:

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ABSTRACT:

The Russell hypersurface $x^2y + x + z^2 + t^3 = 0$ in \mathbb{C}^4 satisfies many properties of \mathbb{C}^3 . However in 1996, Makar-Limanov established that the surface is not isomorphic to \mathbb{C}^3 . Later in the year 2005, Anthony Crachiola, showed that over any field k of arbitrary characteristic, the Russell cubic is not isomorphic to k^3 . It remains an open question whether the surface is stably isomorphic to k^3 . In this talk we will go through the proof of Crachiola on the nontriviality of the Russell cubic.

ALL ARE CORDIALLY INVITED