

# DEPARTMENT OF MATHEMATICS & STATISTICS

## SEMINAR SERIES

### Invited Speaker

**Dr. Sudeshna Basu**

*Department of Mathematics, RKMVERI, India.*

### Title:

**Linear Hahn-Banach Type Extension**

**Operators In Banach Algebras Of Operators**



**Date:** Tuesday 21<sup>st</sup> September, 2021

**Time:** 11:00 am - 12:00 pm

***To join the talk paste this link into your browser***

<https://uwi.zoom.us/j/97773052315?pwd=TytVeVMrRVNiQnJrMjhhd2pHbk9JQT09>

**Meeting ID: 977 7305 2315**

**Passcode: 830751**

## Abstract

The notion of linear Hahn-Banach extension operator was first studied in detail by Heinrich and Mankiewicz (1982) . Previously, Lindenstrauss (1966) studied similar versions of this notion in the context of non-separable reflexive Banach spaces. Subsequently, Sims and Yost (1989) proved the existence of linear Hahn-Banach extension operators in a purely Banach space theoretical set up. In this paper, we study similar questions in the context of Banach modules and module homomorphisms, in particular, Banach algebras of operators on Banach spaces. Based on Dales, Kania, Kochanek, Koszmider and Laustsen (2013), and also Kania and Laustsen(2017) , we give complete answers for reflexive Banach spaces and the non-reflexive space constructed by Kania and Laustsen from the celebrated Argyros-Haydon space with very few operators.

## Dr. Sudeshna Basu

Dr. Sudeshna Basu obtained her Ph.D. from the Indian Statistical Institute, India. She then went on to teach at several universities in USA.

Some of those Universities include, Howard University, Morgan State University and George Washington University.

At present, she is on an assignment at the Premier Institute, Ram Krishna Vivekananda Institute, India.

Her research area is Operator theory and Geometry of Banach Spaces.