

# PIMS Distinguished Lecturer



**Professor Rahul Mukherjee,**

**Indian Institute of Management Calcutta**

**Title:**

**Bose Bush bound revisited: elementary considerations and further prospects**

**February 19<sup>th</sup> at 3:30 – 4:30 pm**

**University of Victoria, Cornett Building,  
COR Room A229**

## **Abstract:**

Orthogonal arrays have numerous applications in various disciplines including statistics, engineering and cryptography. We will revisit the celebrated Bose-Bush bound on orthogonal arrays and examine how an elementary approach, based on a certain mean-variance inequality, can lead to a possibly stronger version of this bound. Further prospects, including extension to mixed-level orthogonal arrays and a connection with multivariate analysis, will be indicated.

## **About Rahul Mukerjee:**

Rahul Mukerjee is a professor of statistics at the Indian Institute of Management Calcutta and a member of the National Statistical Commission, Government of India. Earlier, he was a professor at the Indian Statistical Institute.

Professor Mukerjee received his Ph.D. in statistics (1982) from the University of Calcutta. His research interests include design of experiments, asymptotic theory and cryptography.

Professor Mukerjee is or has been on the editorial boards of leading international journals such as the *Annals of Statistics*, *Biometrika*, *Journal of the Royal Statistical Society Series B* and *Statistica Sinica*. He is a Fellow of the Institute of Mathematical Statistics (USA) and the Indian National Science Academy, and a recipient of various research awards including the Bhatnagar Award and the J.C. Bose National Fellowship from the Government of India.



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