NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

SPMS Undergraduate Odyssey Talk Series AY2122

A Journey through Extremal Combinatorics

Senior Lecturer Dr Ku Cheng Yeaw
School of Physical and Mathematical Sciences

Date: 25 February 2022 (Friday)
Time: 4.30pm - 5.30pm
Venue: NTU SPMS-LT1

Abstract

Extremal Combinatorics studies the size and structure of a collection of objects subject to certain constraints. In this talk, I would be sharing my personal journey through intersection problems of finite sets, permutations, set partitions and perfect matchings, and how they are related to eigenvalues of certain graphs.

Biography

Dr Ku obtained his PhD from Queen Mary, University of London in 2005. He was a Harry Bateman Research Instructor at California Institute of Technology between 2005 and 2008. He was then a Visiting Fellow, Lecturer and Senior Lecturer in the Department of Mathematics, National University of Singapore from 2008 to 2016. Dr Ku joined the School of Physical and Mathematical Sciences, Nanyang Technological University as a Senior Lecturer in 2017.

Dr Ku's research interests lie in combinatorics and graph theory. He is interested in matching polynomials, extremal problems for permutations and related combinatorial structures, probabilistic and algebraic methods used to understand these structures.

Stay in touch!
spmsodysseycomm@e.ntu.edu.sg

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