THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

Entropy-Power Inequalities and Sections of Convex Bodies

by

Prof. Tomasz Tkocz

Carnegie Mellon University, USA

Date : **9 July 2025 (Wednesday)**

Time : **10:30 am – 11:30 am**

Venue : **Rm 801, Ho Sin-hang Engineering Building, CUHK**

Abstract

I shall discuss how certain Rényi entropy power inequalities (e.g. Bobkov and Chistyakov, 2015) are connected to certain sharp bounds on volumes of sections of convex bodies as well as to anti-concentration.

Biography

Tomasz Tkocz is an Associate Professor in Mathematical Sciences, Mellon College of Science, CMU.

Tomasz Tkocz obtained his Ph.D. from the University of Warwick in 2015, working under the supervision of Keith Ball. He was a postdoctoral research associate in the department of mathematics at Princeton University from 2015 to 2017. His research interests include analysis, probability and convex geometry, with an emphasis on high-dimensional phenomena as well as inequalities in information theory.

** ALL ARE WELCOME **