BASICS ON THE HYPERGRAPH CONTAINER METHOD II

Online Seminar

Speaker: Hong Liu
University of Warwick

Time：**Thur, May. 14th, 15:00-16:30**
Zoom meeting ID: 928 186 37949   **Password: 061801**
Link: https://zoom.com.cn/j/92818637949

Abstract: This is a gentle introduction to basics of the hypergraph container method introduced independently by Balogh, Samotij and Morris, and Saxton and Thomason. The method has seen numerous applications in extremal combinatorics and other related areas in the past decade. We will focus mostly on examples, illustrating how to apply this method on various types of problems.
Talk 2:   We will present the original Kleitman-Winston algorithic proof of the graph container lemma，   and see a couple of its applications in extremal combinatorics and combinatorial number theory.

About the speaker: Hong Liu is an assistant professor at the \linebreak Mathematics Institute at University of Warwick, UK. He is currently a UKRI Future Leaders Fellow awarded by UK Research and Innovation. He got his Ph.D. at University of Illinois at Urbana Champaign in 2015, under supervision of Jozsi Balogh. Prior to his current position, Liu was a Leverhulme Early Career Fellow at University of Warwick, working with Oleg Pikhurko. Liu's research interests are mainly in extremal and probabilistic combinatorics, graph theory, Ramsey theory, and combinatorial number theory.