Graph limits and common graphs with arbitrarily large chromatic number

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Time: Nov 18th, 9:00 - 10:00
Zoom meeting ID: 854 3464 7049   **Password:** 121323
Link: https://zoom.us/j/85434647049

Abstract:

Graph limits is a recently developed powerful theory in studying graphs from a continuous perspective. In this talk, we will show how the perspective of graph limits helps with graph homomorphism inequalities and how to make advances in a common theme in extremal combinatorics: when does randomness give nearly optimal bounds? For example, we show this perspective recently helps us answer a question on Ramsey theory raised by Jagger-Stovicek-Thomason'96, Hatami-Hladky-Kral'-Norine-Razborov'12, Conlon-Fox-Sudakov'15, where they asked whether there are common graphs with arbitrarily large chromatic numbers. This is based on a joint work with Dan Kral' and Jan Volec.