

PATT Position in MATHEMATICS

Talks via zoom

Sujet : PATT position in MATHEMATICS - presentation

Heure : 21 janv. 2021 09:45 AM Zurich

Participer à la réunion Zoom

<https://epfl.zoom.us/j/87469079784>

Thursday, 21 January 2021

15:00 - 16:00

Dr Florian RICHTER – Northwestern University, Evanston, USA

Title: Applications of Ergodic Theory to Combinatorics and Number Theory

Abstract:

This talk will focus on the multifaceted and mutually perpetuating relationship between ergodic theory, combinatorics and number theory. We will begin by discussing Furstenberg's ergodic approach to Szemerédi's Theorem, and how it has inspired our recent solution to a long-standing sumset conjecture of Erdős. Thereafter, we will explore a new dynamical framework for treating questions in multiplicative number theory. This includes a new type of ergodic theorem which contains various classical number-theoretic results, such as the Prime Number Theorem, as special cases.