FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA
Fakultät für Mathematik und Informatik

Institut für Mathematik

Seminar zur Stochastik

Mittwoch, 11. November 2026
10:15 Uhr
SR 259, UHG, Fürstengraben 1

Prof. Dr. Michael Anton Högele
(Universidad de los Andes, Bogotá)

“Almost sure rates with guarantees – a quantitative Borel-Cantelli lemma”

Abstract: In this talk we present a quantitative version of the first Borel-Cantelli lemma, which yields sufficient conditions to show a.s. rates of convergence with moment guarantees on the modulus of convergence. After the typical LLN examples we showcase its utility for the convergence of the coupon collector, the a.s. rate of convergence of a randomized linear solver (the random Kaczmarz algorithm), the Lévy construction of Brownian motion and --if time permits-- the appearance of the cliques in Erdös-Rényi graphs.

Alle Interessierte sind herzlich eingeladen!

Kontakt:
Patricia Alonso Ruiz
Professur Wahrscheinlichkeitstheorie
Institut für Mathematik
Inselplatz 5
07743 Jena