ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ

ΣΧΟΛΗ ΧΡΗΜΑΤΟΟΙΚΟΝΟΜΙΚΗΣ ΚΑΙ ΣΤΑΤΙΣΤΙΚΗΣ

ΤΜΗΜΑ ΣΤΑΤΙΣΤΙΚΗΣ ΚΑΙ ΑΣΦΑΛΙΣΤΙΚΗΣ ΕΠΙΣΤΗΜΗΣ

ΠΡΟΣΚΛΗΣΗ

Σας προσκαλούμε στην **ομιλία** του **Dr Gabriel Berzunza Ojeda, Associate Professor, Department of Mathematical Sciences, University of Liverpool, Liverpool, UK**, η οποία θα διεξαχθεί τη **Δευτέρα 23 Μαρτίου 2026, ώρα 13:00** στην **Αίθουσα 335** (3ος όροφος, Κεντρικό Κτίριο Παν. Πειραιώς), με θέμα:

Asymptotic normality of Crump-Mode-Jagers processes

Abstract/Περίληψη: Crump-Mode-Jagers (CMJ) processes are a general class of branching models that generalize the well-known Bienaymé-Galton-Watson processes. They allow arbitrary point processes to dictate an individual's reproduction and replace the simple counting of living individuals with the sum of copies of an arbitrary random process—called a "characteristic"—over all individuals.

In this talk, we present an extension of the recent central limit theorem by Iksanov, Kolesko, and Meiners (2024) to characteristics that depend on individuals and their descendants up to a fixed generation. This extension allows for the examination of more structural properties of the processes, with fringe trees serving as our primary motivating example.

This is joint work with Harlan Connor.

Short Bio: Dr Gabriel Berzunza Ojeda is an Associate Professor in the Department of Mathematical Sciences at the University of Liverpool. His research lies at the intersection of probability theory, stochastic processes, and combinatorics. He earned his PhD in 2016 from the Institute of Mathematics at the University of Zurich under the supervision of Jean Bertoin. Following his doctoral studies, he held postdoctoral positions at the Institute of Mathematical Stochastics at the University of Göttingen (2017–2018) and the Department of Mathematics at Uppsala University (2018–2020).