Du
30
MARS.
2019

16h00
-
17h00

SÉMINAIRE BOURBAKI

Adam HARPER — The Riemann zeta function in short intervals

Institut Henri Poincaré
Amphithéâtre Hermite
11 rue Pierre-et-Marie-Curie, 75005 Paris

INSCRIPTION

A classical idea for studying the behaviour of complicated functions, like the Riemann zeta function ζ(s), is to investigate averages of them. For example, the integrals overT≤t≤2T of various powers of ζ(1/2+it), sometimes multiplied by some other cleverly chosen function, have been investigated extensively to deduce upper and lower bounds for the maximum size of ζ(1/2+it). More recently, Fyodorov and Keating have proposed the investigation of much shorter integrals over T≤t≤T+1. This turns out to lead to interesting connections between various issues in number theory, analysis, mathematical physics and probability, such as branching random walk and multiplicative chaos. I will try to explain some of these connections, ideas from the proofs, and what they tell us about the zeta function.

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HORAIRES

L'institut :
• lundi au vendredi de 8h30 à 18h,
• fermé les jours fériés.

Le musée - Maison Poincaré :
• lundi, mardi, jeudi et vendredi
de 9h30 à 17h30,
• samedi de 10h à 18h,
• fermé le mercredi et le dimanche.

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