
ILIA BINDER, University of Toronto

Multifractal spectrum of SLE boundary collisions.

I will discuss the multifractal spectrum of the intersection of chordal SLE_{κ} curves with the real line. For $\kappa > 4$, this intersection is a random fractal of almost sure Hausdorff dimension $\min\{2 - 8/\kappa, 1\}$. We study the random sets of points at which the curve collides with the real line at a specified “angle” (or, equivalently, the local dimension of harmonic measure is prescribed) and compute an almost sure dimension spectrum describing the metric size of these sets. The talk is based on a joint work with Tom Alberts (Utah) and Fredrik Viklund (KTH).