INDAM Workshop on Holomorphic Iteration, Semigroups, and Loewner Chains.

Continuity of Loewner traces

Steffen Rohde

University of Washington, Seattle, (USA)

The SLE_{κ} trace is known to be continuous in the half-plane or the disc. We prove continuity of the SLE_{κ} trace in any simply connected domain G (except possibly at time t = 0), for $\kappa < 8$. We also prove that its intersection with the boundary ∂G has Hausdorff dimension bounded away from 2 by a constant independent of G (joint work with Christophe Garban and Oded Schramm). We will also discuss continuity properties of the Loewner trace driven by stochstic processes other than Brownian motion (joint with Zhenqing Chen and Michel Zinsmeister).

