

Title: Gibbs phase rule for intermittent maps.

Abstract: In this talk I will give a topological description of the set of Hölder continuous potential having a phase transition for a Manneville-Pomeau map. More precisely, we show that for a map of the form $f(x) = x(1 + x^\alpha) \bmod 1$ on the interval $[0, 1]$. If $\gamma \leq \alpha$ then the space of γ -Hölder continuous potential having a phase transition is a codimension 1 topological manifold. In the case that $\gamma > \alpha$ the set of potentials having a phase transition is empty.