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REGULARITY OF TOPOLOGICAL PRESSURE: FROM ONE TO TWO DIMENSIONAL COMPLEX DYNAMICS

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In this talk we study the thermodynamics of complex Hénon maps which are small perturbations of one-dimensional polynomials. We derive regularity results of the pressure function in the neighborhood of the degenerate map (i.e. the polynomial). As a consequence we obtain that for complex Hénon maps the Hausdorff dimension of the Julia set is discontinuous at the boundary of the hyperbolicity locus.

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