

# Coexistence phenomena in two-dimensional maps

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In the talk various coexistence phenomena for attractors that appear for certain two-dimensional maps will be discussed. It has been proved in recent work with Liviana Palmisano, that in the Hénon family there are positive 2-d Lebesgue measure sets of parameters with coexisting sinks and strange attractors as well as positive 2-d Lebesgue measure sets of parameters with two coexisting strange attractors. The work is based on previous papers with L. Carleson, M. Viana and L.-S. Young but with new elements. I will describe this work and also discuss background and open problems.