Fabrizio Bianchi

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Dynamical stability and bifurcations from one to several complex variables

We discuss the stability of holomorphic dynamical systems under perturbation. In dimension 1, the theory is now classical and is based on works by Lyubich, Mané-Sad-Sullivan, and DeMarco. I will review this theory and present a recent generalisation valid for families of endomorphisms in any dimension. Since classical 1-dimensional techniques no longer apply in higher dimensions, our approach is based on ergodic and pluripotential methods. I will list several open questions, as well as some partial results in these directions.

André de Carvalho

Universidade de São Paulo

Structures on 1-, 2- and 3-dimensional spaces dynamical systems: an impressionistic overview

We will discuss several instances of the "same" construction: some dynamical system with an exponentially growing feature leads to a geometric structure on the underlying space after passing to the limit with the appropriate normalization.