

Bifurcations in families of meromorphic maps

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We will discuss natural parameter spaces of transcendental meromorphic maps with finitely many singular values. Due to the presence of both poles and asymptotic values, a new type of bifurcation arises for which a periodic cycle can disappear to infinity along a parameter curve. By studying this new type of bifurcations we are able to connect absence of bifurcations to stability of Julia sets, concluding that J -stable parameters form an open and dense subset of the parameter space, in analogy to the celebrated results by Mañé-Sad-Sullivan and Lyubich. All our theorems hold for general finite type maps in the sense of Epstein, satisfying certain conditions. This is joint work with Nuria Fagella and Matthieu Astorg.