

Intersections in holomorphic dynamical systems

Javier Ribon (UFF)

Resumo/Abstract:

Let us move a curve containing the origin by the action of a group of origin-preserving biholomorphisms of the plane. We want to characterize the groups such that the set of Milnor numbers, describing the tangency of the iterates of a first given curve with a second fixed curve, is always bounded for any choice of pair of curves. Generalizations of this property in higher dimension are straightforward to define. It is well-known that such a property holds for cyclic groups and has been generalized to other classes of groups by Seigal-Yakovenko, Binyamini and myself. It remains open to know whether it is possible to characterize the groups that hold this uniform intersection property. We will provide a solution of this problem in dimension two.