

An introduction to discrete holomorphic dynamics

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Abstract:

This course is thought of as an introduction to some aspects of complex dynamical systems with emphasis on the discrete side. The focus of the course will be on the dichotomy between local and global dynamical phenomena related to iteration of holomorphic endomorphisms in complex dimension 1, and on the relations between the local and the global aspect. If time allows, we will also deal with the higher dimensional case. Several research problems will be mentioned during the course.

References:

1. JOHN MILNOR, *Dynamics in one complex variable*. Third edition , Annals of Mathematics Studies, 160. Princeton University Press, Princeton, NJ, 2006. viii+304 pp.
2. XAVIER BUFF AND JOHN H. HUBBARD, *Dynamics in One Complex Variable*, (in preparation).