Introduction to holomorphic dynamics in several complex variables

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In this course we will study the dynamics of a holomorphic endomorphism of a complex manifold of dimension at least 2 both from the global and the local point of view. From the global point of view, we shall focus on the Fatou set, that is the place where the dynamics is stable, and discuss some of its geometric properties. From the local point of view will will focus on the local dynamics near a fixed point, and in particular when the differential of the map at the fixed point is the identity. We shall then study how to use information on the local dynamics in the study and classification of the Fatou set.