

The first part of this course will deal with iterations of rational maps of projective space (indeterminacy set, degrees of iterates, algebraically stable maps), as well as with Fatou sets and Julia sets. The notion of Green current associated with a meromorphic map will also be studied.

The second part of the course will deal with polynomial automorphisms of \mathbb{C}^k and the notions of periodic points, entropy and basin of attraction.

The third part of the course will deal with holomorphic endomorphisms of projective space: exterior powers of certain currents, mixing and Lyapunov exponents.