

Complex foliations, dynamics and geometry

Universidade Federal Fluminense, Niterói, July 23-27, 2018

Posters

Title: Homotopy groups of generic leaves of logarithmic foliations

Speaker: Diego Rodriguez

Institution: Universidad Autnoma de Aguascalientes, México

Abstract: We study the homotopy groups of generic leaves of logarithmic foliations on complex projective manifolds. We exhibit a relation between the homotopy groups of a generic leaf and of the complement of the polar divisor of the logarithmic foliation. Also, we prove a Lefschetz hyperplane section type theorem for generic leaves of logarithmic foliations on the projective space $\mathbb{C}P^{n+1}$.

Title: Characterization of generic projective space bundles and applications to foliations

Speaker: Federico Quallbrunn

Institution: Universidad CAECE, Argentina

Abstract: Associated with the infinitesimal unfoldings of a codimension one foliation is a sub-scheme of the singular locus. In the projective 3-space this sub-scheme is an arithmetically Cohen-Macaulay curve. Under suitable hypotheses this scheme coincides with the clousure of the set of Kupka points of the foliations. These results impose strong conditions on the geometry of the codimension two components of the singular set of a foliation in \mathbb{P}^3 .