

Title:

Topological aspects of singularities of planar holomorphic foliations

Abstract:

We describe a suitable systems of neighborhoods U of the singularity of a germ of holomorphic foliation \mathcal{F} in the plane which is generic in the set having a fixed equisingularity class of separatrices S . The main properties of these neighborhoods are that all the $U^* = U \setminus S$ have the same topology and the leaves of $\mathcal{F}|_{U^*}$ are incompressible in U^* . A more technical property of them allows us to define a new topological invariant associated to the germ \mathcal{F} . We describe it and its relation with the previously well known ones, namely, the Camacho-Sad indices and the projective holonomy representations.