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# **Topological and geometrical aspects of the study of projective plane curves**

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ABSTRACT

Topology and geometry of quasi-projective varieties play an important role in local and global singularity theory. When interested in fundamental groups, it is enough to study the surface case; complements of projective plane curves are a particularly interesting case.

One important invariant (for both the groups and the varieties) is given by characteristic varieties, which can be seen as a generalization of Alexander polynomials. We review the state of the art and present new results about the relationship of these invariants with mappings on 1-dimensional orbifolds (following a joint work with J.I. Cogolludo)