ABSTRACT

In this paper abelian branched coverings of smooth complex projective surfaces are studied. Geometric information about the coverings, such as the first Betti number of a smooth model or intersections of embedded curves, are related to topological and combinatorial information about the base space and branch locus. Special attention is given to the family of examples where the base space is the complex projective plane and the branch locus is a configuration of lines defined by equations with real coefficients.

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