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Jakob M. Stix*, Mathematisches Institut, University of Bonn, Beringstrasse 1, 53115 Bonn, Germany. *On anabelian properties of the moduli spaces of smooth projective curves.*

Anabelian geometry deals with the arithmetical/geometrical content of the étale fundamental group of a variety. In particular, it should be possible to describe maps to an anabelian variety in terms of the fundamental group alone, as for example this is the case in homotopy theory with Eilenberg-MacLane spaces.

The moduli spaces of smooth projective curves are generally believed to share many anabelian properties. The talk will explain published results that deal with constant maps and the problem of extending a map from some open dense subset, leading to an anabelian and generalized version of Moret-Bailly's purity theorem for smooth projective curves. (Received February 13, 2006)