Moduli of curves, surfaces and their invariants



Contribution ID: 3 Type: not specified

Hodge theory and projective structures on compact Riemann surfaces

Thursday, 2 October 2025 14:30 (1 hour)

A projective structure on a compact Riemann surface is an equivalence class of projective atlases, i.e., an equivalence class of coverings by holomorphic coordinate charts such that the transition functions are all Moebius transformations. Any compact Riemann surface admits two canonical projective structures: one coming from uniformization's theorem, and one from Hodge theory. These yield two (different) families of projective structures over the moduli space Mg of compact Riemann surfaces. We wish to compare them and give a characterization of the Hodge theoretic family.

Primary author: Dr TAMBORINI, Carolina (Universität Duisburg-Essen)

Presenter: Dr TAMBORINI, Carolina (Universität Duisburg-Essen)