Geometry of Riemann Surfaces

Madrid, 24th-26th May 2023

Speaker: Sudeb Mitra, City University of New York.

Title: Tame quasiconformal motions and families of Mobius groups.

Abstract: The subject of this talk is a sequel to the paper "Teichmueller spaces and tame quasiconformal motions"by Jiang-Mitra-Shiga-Wang (Tohoku Math J. Vol 70, No 4, pp 607–631, 2018). Our main theorem proves a result on isomorphisms of continuous families of Mobius groups arising from a group-equivariant tame quasiconformal motions of a closed set over a connected Hausdorff space. This is an analogue for tame quasiconformal motions, of Bers's theorem on isomorphisms of holomorphic families of Mobius groups. Our techniques use some properties of the Teichmueller space of a closed set in the Riemann sphere. In our talk, we will discuss these properties. This is a joint work with Jiang, Shiga, and Wang.