

Geometry/Topology Seminar

Simultaneous uniformization for $SL(3, \mathbb{C})$

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Abstract: Given a closed surface S of genus at least 2, Bers' simultaneous uniformization provides a way to holomorphically associate pairs of oppositely oriented complex structures on S to quasi-Fuchsian hyperbolic 3-manifolds. In this talk, we'll discuss joint work with Christian El Emam in which we give a procedure for holomorphically associating (many, but not all) pairs of Hitchin representations into $SL(3, \mathbb{R})$ to representations to $SL(3, \mathbb{C})$. Along the way, we'll introduce conformal harmonic maps into holomorphic Riemannian symmetric spaces and other related objects.

Wednesday, October 2 at 3:00 PM in 427 SEO