Geometric Structures Associated to Anosov Representations

Tuesday, June 20, 2023 3:00 PM (1 hour)

Anosov representations can be considered a generalization of convex-cocompact representations to groups of higher-rank. In this talk, we are considering connected components of Anosov representations from the fundamental group of a closed hyperbolic manifold N, and which contains Fuchsian representations, and their associated domains of discontinuity. We will prove that the quotient of these domains of discontinuity is always smooth fiber bundles over N. Determining the topology of the fiber is hard in general, but we are able to describe it for representations in Sp(4,C), and for the domain of discontinuity in the space of complex Lagrangians in C^4 by using the classification of smooth 4-manifolds. This is joint work with Daniele Alessandrini, Nicolas Tholozan, and Anna Wienhard.

Presenter: Prof. MALONI, Sara (University of Virginia)