



Teichmüller Theory Seminar

Complex deformations of Anosov representations

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Abstract

An Anosov representation of a hyperbolic group is a homomorphism from the group into a semi-simple Lie group which satisfies a certain dynamical property: from this property one deduces that Anosov representations are discrete, faithful and the set of all Anosov representations is an open subset of the space of all homomorphisms. In recent years, Guichard-Weinhard produced examples of co-compact domains of discontinuity for Anosov representations, which lie in various homogeneous spaces, thus giving an answer to the question of whether or not Anosov representations appear as monodromies of locally homogeneous geometric structures on manifolds. In this talk, which comprises joint work with David Dumas, I will discuss some of the complex analytic features of these locally homogeneous geometric manifolds in the case the relevant homogeneous space is a generalized flag variety. In particular, we will give sufficient conditions to compute the space of all infinitesimal deformations of the complex manifold underlying these manifolds.

Thursday, 04 February 2016, 4pm

Smith Hall 204