

Departmental Colloquium

Geometric Structures associated to Higher Teichmüller Theory

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Abstract: The Teichmüller space of a surface S is the space of marked hyperbolic structure on S , up to equivalence. By considering the holonomy representation of such structures, this space can also be seen as a connected component of representations from the fundamental group of S into $\text{Isom}(\mathbb{H}^2)$. Generalizing this point of view, Higher Teichmüller Theory studies connected components of representations from the fundamental group of S into Lie groups of rank greater than 1.

We will discuss parts of the classical theory of deformations of geometric structures, Higher Teichmüller Theory and the notion of Anosov representation. We will conclude by describing the fact that these representations correspond to deformation of certain geometric structures, where we will also discuss a recent joint work with Alessandrini, Tholozan and Wienhard.

If you'd like to join for lunch or dinner, or meet Sara during her stay, please reach out to schapos@uic.edu

Friday, November 10 at 3:00 PM in 636 SEO