

Mathematics Colloquium

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Higher Teichmueller Spaces

Abstract: The Teichmueller space of an orientable surface of genus g is a smooth cover of the moduli space of Riemann surface. Due to the uniformization theorem, one model of Teichmueller space is the deformation space of marked hyperbolic structures on the surface. Therefore, Teichmueller space embeds into the variety of representation of the fundamental group of the surface into $PSL(2, R)$. In recent year several higher Teichmueller spaces have been defined. These spaces are components of the variety of representations of the fundamental group of the surface into simple Lie groups G . Higher Teichmueller spaces resemble classical Teichmueller space in various ways, but many features of classical Teichmueller space are still unknown for higher Teichmueller spaces.

Wednesday, October 8

**4:00-5:00 pm
204 Smith Hall**