

COLLOQUIUM
UNIVERSITY OF PITTSBURGH
FRIDAY, MARCH 30, 2018

704 THACKERAY HALL

3:30 P.M.

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DYNAMICS IN HIGHER TEICHMULLER THEORY

ABSTRACT: Hitchin discovered a component of the space of representations of a surface group into $PSL(n, R)$, which bears many resemblances to the Teichmuller space of Fuchsian representations of the surface group into $PSL(2, R)$. Labourie introduced dynamical techniques to show that these Hitchin representations are discrete and faithful. Sambarino associated Anosov flows to Hitchin representations whose periods record the spectral data of the representation.

In this talk, we will survey this earlier theory of Hitchin representations and discuss how to use the flows described by Sambarino to construct Riemannian metrics on the Hitchin component and to obtain rigidity results. (These results are joint work with Martin Bridgeman, Francois Labourite and Andres Sambarino.)

Refreshments served at 3:00 p.m.
in the Math Dept. COMMON ROOM, Thackeray 705