

Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

12:00 pm, Tuesday, May 3, 2016, 243 Altgeld Hall

Jérémy Toulisse (University of Southern California)

Hitchin representations in $Sp(4, \mathbb{R})$ and conformally flat space-times

Abstract: Given a closed oriented surface S of genus $g > 1$ and using the isomorphism between $Sp(4, \mathbb{R})$ and $SO(2, 3)$, we can associate to a representation from the fundamental group of S to $Sp(4, \mathbb{R})$ an action on the Einstein universe (which is the model space for 3-dimensional conformally flat Lorentz structure). In this talk, we will explain how to realize Hitchin representations in $Sp(4, \mathbb{R})$ as holonomy of conformally flat Lorentz structures on the unit tangent bundle of S . This is a joint work with Nicolas Tholozan.

Video (unavailable)