

# SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

**TBA**

**Lundi 22 Mai 2017, 16 :30**

IHES, Amphithéâtre Léon Motchane( Séminaire Géométrie et groupes discrets )

Domaines : hep-th

Titre : *Convex real projective structures and Anosov representations*

Orateur : **Jeffrey Danciger ( University of Texas at Austin )**

Résumé : *We investigate the degree to which the geometry of a compact real projective manifold with boundary is reflected in the associated holonomy representation, a representation of the fundamental group in the projective general linear group  $PGL(n, \mathbb{R})$  which in general need not have any nice properties. We show that if the projective manifold is strictly convex, then its holonomy representation is projective Anosov, a condition which generalizes the dynamical properties of convex cocompact representations in rank one (e.g. hyperbolic) geometry. Conversely, a strictly convex projective manifold may be constructed from a projective Anosov representation that preserves a properly convex set in projective space. Applications include new examples of both convex projective manifolds and Anosov representations. Joint work with François Guéritaud and Fanny Kassel.*

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