## SEMPARIS – Séminaires en région parisienne

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## **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,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.