SEMPARIS – Séminaires en région parisienne

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

TBA

Lundi 18 Juin 2018, 16 :30
IHES, Centre de conférences Marilyn et James Simons(Séminaire "Géométrie et groupes discrets")
Domaines : hep-th

Titre : *Bi-Lagrangian structures and Teichmüller theory*

Orateur : **Brice Loustau (Rutgers University)**

Résumé : *A bi-Lagrangian structure on a manifold is the data of a symplectic form and a pair of transverse Lagrangian foliations. Equivalently, it can be defined as a para-Kähler structure, i.e. the para-complex analog of a Kähler structure. After discussing interesting features of bi-Lagrangian structures in the real and complex settings, I will show that the complexification of any Kähler manifold has a natural complex bi-Lagrangian structure. I will then specialize this discussion to moduli spaces of geometric structures on surfaces, which typically have a rich symplectic geometry. We will see that that some of the recognized geometric features of these moduli spaces are formal consequences of the general theory while revealing new other features, and derive a few well-known results of Teichmüller theory. Time permitting, I will present the construction of an almost hyper-Kähler structure in the complexification of any Kähler manifold. This is joint work with Andy Sanders.*
