SEMPARIS – Séminaires en région parisienne

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TBA

Jeudi 21 Mars 2019, 14 :30
IHES, Amphithéâtre Léon Motchane(Cours de l'IHES)
Domaines : hep-th

Titre : *Bridgeland Stability over Non-Archimedean Fields (2/4)*

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Résumé : *Bridgeland stability structure/condition on a triangulated category is a vast generalization of the notion of an ample line bunlde (or polarization) in algebraic geometry. The origin of the notion lies in string theory, and is applicable to derived categories of coherent sheaves, quiver representations and Fukaya categories. In a category with Bridgeland stability every objects carries a canonical filtration with semi-stable pieces, an analog of Harder-Narasimhan filtration.*

It is expected that for categories over complex numbers Bridgeland stability structures often admit analytic enhancements, similar to the relation between ample bundles and usual Kaehler metrics. In a sense, this should be a generalization Donaldson-Uhlenbeck-Yau theorem which syas that a holomorphic vector bundle over compact Kaehler manifold is polystable if and only if it admits a metrization satisfying hermitean Yang-Mills equation.

In my course I will talk about a non-archimedean analog of analytic Bridgeland stability. I will show several examples, results and conjectures. In particular, I'll introduce non-archimedean moment map equations, generalized honeycomb diagrams, and hypothetical stability on derived categories of coherent sheaves on maximally degenerating varieties over non-archimedean fields.