Du
04
NOV.
2022

16h30
-
18h00

ÉQUATIONS DIFFÉRENTIELLES MOTIVIQUES ET AU–DELÀ

Spectral data for higher direct images of parabolic Higgs bundles

IHP
11, rue Pierre et Marie Curie

INSCRIPTION

Mochizuki's Kobayashi-Hitchin correspondence allows us to represent local systems on quasiprojective varieties by parabolic logarithmic Higgs bundles. The Sabbah-Mochizuki theory generalizing Saito's mixed Hodge modules then provides a framework for the 6-functor
formalism on these objects. However, this setup involves working with lambda-connections for
all values of lambda. In our work with Donagi and Pantev, we made explicit the
formula for the higher direct image, looking solely at the Dolbeault fiber (lambda = 0) of Higgs bundles. In generic cases this yields a nice formula for the spectral variety
of the higher direct image Higgs bundle. We'll then look at how this applies to the question of calculating Hecke correspondences in the Donagi-Pantev program for constructing
Hecke eigensheaves in geometric Langlands.

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HORAIRES

L'institut :
• lundi au vendredi de 8h30 à 18h,
• fermé les jours fériés.

Le musée - Maison Poincaré :
• lundi, mardi, jeudi et vendredi
de 9h30 à 17h30,
• samedi de 10h à 18h,
• fermé le mercredi et le dimanche.