Séminaire Groupes Réductifs et Formes Automorphes

Deligne-Lusztig duality on the stack of local systems.

Exposé de Dario Beraldo
(Toulouse)

Résumé :

In the setting of the geometric Langlands conjecture, we argue that the phenomenon of divergence at infinity on the stack of G-bundles on a smooth complete curve is controlled by the locus of semisimple local systems (for the Langlands dual group). We prove this by first introducing the Deligne-Lusztig functors (substitutes for the Serre functors, which do not make sense in our situation), and then by describing these functors explicitly. Along the way, we obtain a global geometric version of a theorem of Lusztig on the Steinberg module.