

Séminaire Groupes Réductifs et Formes Automorphes

Le 24 octobre 2016 à 10h30 (Jussieu)

On smoothing singularities of elliptic orbital integrals and Beyond Endoscopy

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Résumé : Beyond Endoscopy is a strategy proposed by R. Langlands in 2001 to prove Functoriality, a key conjecture of the Langlands Program. Recent work of S.A. Altug completes the 'preliminary analysis' first considered by Langlands. In this talk, I will outline these ideas, following J. Arthur's elaboration of them, and discuss a framework for a tempered form of the Arthur-Selberg trace formula. I will also report on generalizing certain aspects of Altug's analysis to $GL(n)$. In particular, we show that the use of the approximate functional equation to smooth singularities of real orbital integrals generalizes to this case. This portion is joint work with O.E. Gonzalez, C.H. Kwan, S.J. Miller, and R. Van Peski.