On Stablity and Endoscopic Transfer of Unipotent Orbital Integrals on P-adic Symplectic Groups

Magdy Assem

The theory of endoscopy is an intriguing part of the Langlands program, as it provides a way to attack the functoriality principle of Langlands for certain pairs of reductive groups (G,H), in which H is what is known as an endoscopic group for G. The starting point for this method is a close study of the relationship of orbital integrals on G with stable orbital integrals on H. This volume investigates unipotent orbital integrals of spherical functions on p-adic symplectic groups. The results are then put into a conjectural framework, that predicts (for split classical groups) which linear combinations of unipotent orbital integrals are stable distributions.