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A simple definition of transfer factors for unramified groups. (English) Zbl 0828.22015

Adams, Jeffrey (ed.) et al., Representation theory of groups and algebras. Providence, RI: American Mathematical Society. Contemp. Math. 145, 109-134 (1993).

The paper is concerned with the transfer factors for reductive groups, defined by Langlands and Shelstad. The author considers the case where G and its endoscopic group H are defined over the ring of integers O_F of the local field F , G is quasi-split over F , G and H split over an unramified extension of F and $G(O_F)$ and $H(O_F)$ are hyperspecial. Under these assumptions the author gives a simple characterization of the transfer factors by first reducing to the case of compact elements, next to topologically unipotent elements and finally to elements near 1. The regular unipotent orbital integrals for G and H are computed explicitly (for the unit element of the Hecke algebras) in order to check that the first term of the Shalika germ expansion for the κ -orbital integral of G with transfer factor coincides with the first term of the expansion of the stable orbital integral for H .

For the entire collection see [\[Zbl 0773.00011\]](#).

Reviewer: [J.G.M.Mars \(Utrecht\)](#)

MSC:

- [22E35](#) Analysis on p -adic Lie groups
- [11S37](#) Langlands-Weil conjectures, nonabelian class field theory
- [20G25](#) Linear algebraic groups over local fields and their integers

Cited in **16** Documents

Keywords:

[transfer factors](#); [unramified groups](#); [reductive groups](#)