

# The norm map and consequences

David Goldberg  
goldberg@ath.purdue.edu  
Purdue University, USA

We report on our ongoing work with Shahidi on the tempered spectrum of classical groups. We continue to exploit the theory of twisted endoscopy. In this process we are led to a natural correspondence between twisted conjugacy classes of  $GL(n)$  and conjugacy classes of classical groups (a one to finite correspondence). We examine the case of odd orthogonal groups and discuss subtleties this case exhibits. We also discuss some connections between this line of work, and the recent work on transfer of automorphic forms from classical to general linear groups, by Cogdell, Kim, Piatetski-Shapiro, and Shahidi.