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**Steven T Spallone\*** ([sspallone@math.ou.edu](mailto:sspallone@math.ou.edu)). *An Integral Formula of Shahidi.*

Let  $\tilde{G}$  be a unitary or classical group over a local field of characteristic 0, and  $P = MN$  a parabolic subgroup. Then  $M$  may be written as a product of groups  $G \times H$ , with  $G$  a general linear group, and  $H$  a reductive group of the same kind as  $\tilde{G}$ . In this talk we study the case in which  $G$  and  $H$  naturally act on vector spaces of the same dimension (in other words they are viewed as groups of matrices of the same size). In this case, we decompose the Haar measure  $dn$  on  $N$ . We do this by choosing orbit representatives for the adjoint action of  $M$  on  $N$ , via a “norm correspondence”, parametrizing these orbits by regular semisimple elements in  $H$ . The decomposition of this integral has application to computing the residues of intertwining operators of induced representations of  $\tilde{G}$ . (Received September 17, 2009)