Meeting: 1001, Evanston, Illinois, SS 17A, Special Session on Geometric Aspects of the Langlands Program

1001-22-219   **Thomas C Hales***, Math dept, 416 Thackeray Hall, University of PIttsburgh, Pittsburgh, PA 15260. *Applications of Motivic Integration to Representation Theory.*

Motivic integration is a type of integration that was introduced by M. Kontsevich several years ago. It is an integral that takes values in a ring of motives. This lecture will give a survey applications that motivic integration has found in the representation theory of reductive p-adic groups. In particular, applications to characters and orbital integrals will be presented. (Received August 26, 2004)