1001-22-301   **Dan M. Ciubotaru*** (`ciubo@math.mit.edu`), Massachusetts Institute of Technology, Dept. of Mathematics, 77 Massachusetts Ave., Room 2-180, Cambridge, MA 02139-4307. *The spherical unitary dual for split p-adic exceptional groups.*

For split reductive p-adic groups, it is known, by the results of Barbasch and Moy, that the determination of the unitary representations with nontrivial Iwahori fixed vectors can be reduced to the identification of the unitary finite dimensional modules over the associated Iwahori-Hecke algebra. In this algebraic setting, they classified the unitary spherical dual of classical p-adic groups. Similar methods can be applied for the remaining exceptional groups. I will present the main ingredients of the classification with examples from the exceptional cases. This talk is based on joint work with Dan Barbasch. (Received August 30, 2004)