

Meeting: 1004, Bowling Green, Kentucky, SS 9A, Special Session on L-Functions

1004-11-124 **James W Cogdell*** (cogdell@math.ohio-state.edu), Department of Mathematics, Ohio State University, 231 W 18th Avenue, Columbus, OH 43210. *Bessel Functions and Functoriality.*

In the recent proofs of functoriality for the split classical groups and some quasi-split examples, (partial) Bessel functions of local representations play a crucial role. In this talk (time permitting) I would like to explain the role these Bessel functions play in the proof of functoriality via the converse theorem and then explain a new result on the asymptotics of (partial) Bessel functions for quasi-split p-adic groups which should play a role in extending functoriality to new cases. (Received January 21, 2005)