Tatiana K Howard\* (thoward@math.umd.edu), Math Dept, University of Maryland, College Park, MD 20742. Lifting of characters on p-adic orthogonal and metaplectic groups.

Let F be p-adic field. Consider a dual pair  $(SO(2n+1), \widetilde{Sp}(2n))$ , where  $\widetilde{Sp}(2n)$  is the metaplectic cover of the symplectic group Sp(2n) and SO(2n+1) is the split orthogonal group over F. We show that there is a matching of Cartan subgroups between SO(2n+1) and  $\widetilde{Sp}(2n)$  via stabilized orbit correspondence. We say two representations of SO(2n+1) and  $\widetilde{Sp}(2n)$  correspond, if their characters on matching Cartan subgroups differ by a transfer factor, which is essentially character of the difference of the two halves of the oscillator representation. We show that this correspondence is compatible with parabolic induction: if two representations of Levi factors correspond, then after parabolic induction the two resulting representations also correspond. These results were motivated by the paper Lifting of characters on orthogonal and metaplectic groups by J. Adams who considered the case  $F = \mathbb{R}$ . (Received September 13, 2006)