Quantum Induction.

Let $E_n$ be the Harish-Chandra module of $o(p, q)$ associated with the nilpotent orbit $[1^{p+q-2n}, 2^n]$, studied by Zhu-Huang and Huang-Li. Let $o(p_1, q_1) \times o(p - p_1, q - q_1)$ be the subgroup block-diagonally embedded in $o(p, q)$. Consider the restriction of $E_n$ to $o(p_1, q_1) \times o(p - p_1, q - q_1)$. In this talk, we will show that this restriction induces a correspondence between quasi-simple $o(p_1, q_1)$-modules and quasi-simple $o(p - p_1, q - q_1)$-modules. For certain $n, p_1, q_1$, our correspondence coincides with the parabolic induction. (Received September 27, 2004)