1023-22-62 Roger Howe* (howe@math.yale.edu), Department of Mathematics, Yale University, PO BOX 208283, New Haven, CT 06520. Recent Applications of Induced Representations.

Much of George Mackey's pioneering work in the theory of group representations developed the idea of induced representation and explored the many uses of these representations. This talk will discuss two recent applications of induced representations, one to the qualitative structure of unitary representations of semisimple Lie groups, and one to quantum information theory. (Received July 24, 2006)