September 21: Pierre Clare (Dartmouth), "The reduced C^*-algebra of a Lie group and its K-theory."

For every locally compact group G, there is a $C*$-algebra whose spectrum is homeomorphic to the tempered dual of G, called the *reduced C*-algebra of G*. In this talk we will show how the knowledge of the tempered dual of a real reductive group allows to describe this algebra precisely enough to compute its K-theory and (re)verify the Connes-Kasparov Conjecture. The key to this approach is a description of parabolic induction in terms of Hilbert modules. Conversely, we will discuss representation-theoretic questions that arise in this context. This is joint work with T. Crisp and N. Higson.