

April 8: Tanmay Deshpande (TIFR) *Character sheaves on algebraic groups*

Character sheaves on an algebraic group are supposed to be the geometric analogues of irreducible characters of a finite group. In 1980s Lusztig developed the theory of character sheaves on reductive groups and gave a geometric description of the character theory of finite reductive groups. Inspired by Lusztig's works, Boyarchenko and Drinfeld developed the theory of character sheaves on unipotent groups. In this talk, I will describe an approach (due to Drinfeld) towards a theory of character sheaves on general algebraic groups and describe the known results in the case of solvable algebraic groups.