1035-20-1974 Nat Thiem and Vidya Venkateswaran* (vidyav@math.uchicago.edu). Restricting supercharacters of the finite group of unipotent uppertriangular matrices.

Finding the character theory of certain groups is known to be a difficult task: for example, in the case of the finite group of unipotent upper-triangular matrices U(n), it is a "wild" problem. Supercharacter theory, developed by C. Andre, relaxes some of the conditions of the representation theory and has been able to provide rich results in these formerly intractible problems. In this paper, we compute the supercharacter theory for a family of subgroups that interpolate between U(n) and U(n-1). We then develop a restriction rule for the supercharacters between interpolating subgroups and use this to extract a formula for the restriction of a supercharacter from U(n) to U(n-1). (Received September 21, 2007)