1073-05-36   **Carolina Benedetti*** (`caro.benedetti@gmail.com`). *Supercharacter theory and symmetric functions.* Preliminary report.

In this talk we give a quick introduction to supercharacters and then we will present some results about the supercharacter theory for the group of unipotent upper triangular matrices over the finite field $\mathcal{F}_q$, denoted by $U_n(q)$. This SC theory of $U_n(q)$ realizes the Hopf algebra of symmetric functions in non commuting variables. These results are join work during an AIM workshop on Supercharacters and Combinatorial Hopf algebras.

Also, we give partial results from the combinatorial point of view on the supercharacter theory for the classical finite group of upper triangular matrices of type D. (Received July 17, 2011)