SUPERCHARACTERS AND THE ART OF SQUINTING IN THE RIGHT WAY

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ABSTRACT. The character theory of a finite group can give useful information about the group structure and the eigenvalues of its actions. However, when the full character theory is not at our disposal (and is perhaps impossible to get), then one might be interested in a coarser version of the theory or a supercharacter theory. This talk gives an example for how one might become interested in using a supercharacter theory, describes the basic theory, and then outlines some of the algebraic combinatorics that has come out of one such well-developed theory.