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David J. Benson and **Jon F. Carlson*** (jfc@math.uga.edu), Department of Mathematics,
University of Georgia, Athens, GA 30602. *Nilpotence and generation in the stable module category.*

Nilpotence has been studied in stable homotopy theory and algebraic geometry. We study the corresponding notion in modular representation theory of finite groups, and apply the discussion to the study of ghosts, and generation of the stable module category. In particular, we show that for a finitely generated kG -module M , the tensor M -generation number and the tensor M -ghost number are both equal to the degree of tensor nilpotence of a certain map associated with M . (Received September 15, 2016)