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Christopher P. Bendel, Daniel K. Nakano, Cornelius Pillen and Paul Sobaje*
(psobaje@georgiasouthern.edu). *New results on the Tilting Module Conjecture.*

Let G be a simple and simply connected algebraic group over a field of characteristic $p > 0$. It has become clear that answers to various classical problems about G -modules are dependent upon a better understanding of the indecomposable tilting modules for G whose highest weight is in the "p-restricted region above the Steinberg weight." Recently, the authors found an example of such a tilting module that was not indecomposable over the Lie algebra of G , contradicting a longstanding conjecture of Donkin. In this talk, we will discuss continued work on this problem, including new cases in which the authors have verified Donkin's conjecture. (Received January 24, 2020)