

1161-20-161

**Christopher Bendel, Daniel Nakano, Cornelius Pillen\*** (pillen@southalabama.edu) and  
**Paul Sobaje.** *On Donkin's Tilting Module Conjecture and groups of type  $G_2$ .*

Tilting modules for reductive algebraic groups over fields with positive characteristics feature prominently in new approaches towards finding character formulas for simple modules. A long-standing conjecture by Donkin says that certain tilting modules are isomorphic to indecomposable injective modules when restricted to the Frobenius kernel of the algebraic group. It was recently shown that the conjecture does not hold for a group of type  $G_2$  and characteristic 2. In this talk we verify Donkin's conjecture for  $G_2$  and characteristic 3. (Received August 16, 2020)