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Skip Garibaldi (skip@garibaldibros.com), Center for Communications Research, San Diego, CA 92121, and **Daniel K. Nakano*** (nakano@math.uga.edu), Department of Mathematics, University of Georgia, Athens, GA 30602. *Bilinear and Quadratic Forms of Rational Modules of Split Reductive Groups.*

The representation theory of semisimple algebraic groups over the complex numbers (equivalently, semisimple complex Lie algebras or Lie groups, or real compact Lie groups) and the question of whether a given complex representation is symplectic or orthogonal has been solved since at least the 1950s. Similar results for Weyl modules of split reductive groups over fields of characteristic different from 2 hold by using similar proofs. This paper considers analogues of these results for simple, induced and tilting modules of split reductive groups over fields of prime characteristic as well as a complete answer for Weyl modules over fields of characteristic 2.

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