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Brian Parshall* (bjp8w@virginia.edu), Department of Mathematics, University of Virginia,
Charlottesville, VA 22903. *Reduced standard and costandard modules*. Preliminary report.

Let G be a simple, simply connected algebraic group defined over a field k of characteristic $p > h$ (the Coxeter number). Given a dominant weight λ , the reduced standard (resp., costandard) module $\Delta^{\text{red}}(\lambda)$ (resp., $\nabla_{\text{red}}(\lambda)$) are defined by a process of reduction mod p from the quantum enveloping algebra at a p th root of unity. When the Lusztig character formula holds, these modules have remarkable homological properties. This talk (which is joint work with Leonard Scott) reports on progress to establish that Weyl modules have reduced standard filtrations. Some applications are indicated. (Received February 09, 2009)