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Stephen Griffeth* (griffeth@math.umn.edu). *Orthogonal functions attached to representations of $G(r, p, n)$.*

For each irreducible representation V of the group $G(r, p, n)$ we consider the space $M(V)$ of polynomial functions on the reflection representation with values in V . A certain family of commutative operators introduced by Dunkl and Opdam turns out to act in an upper-triangular fashion on $M(V)$, and the simultaneous eigenvectors for this action are a class of orthogonal functions generalizing the non-symmetric Jack polynomials. We will discuss norm and evaluation formulas for these functions, and indicate how they may be used to produce some new examples of finite dimensional modules for the rational Cherednik algebra of type $G(r, p, n)$. Part of the talk is based on the paper arXiv:0707.0251. (Received January 31, 2008)