

Meeting: 1001, Evanston, Illinois, SS 19A, Special Session on Algebraic Representations and Deformations

1001-16-389 **Ian M Musson***, University of Wisconsin-Milwaukee, Milwaukee, WI 53201-0413, and **Jeb F. Willenbring**, University of Wisconsin-Milwaukee, Milwaukee, WI 53201-0413. *FCR factors of Enveloping algebras.*

If \mathfrak{g} is a semisimple Lie algebra, we describe the prime factors of $U(\mathfrak{g})$ that have enough finite dimensional modules, and also determine, which finite dimensional $U(\mathfrak{g})$ -modules are modules over a given prime factor. As an application we study finite dimensional modules over some rings of invariant differential operators arising from Howe duality. (Received August 31, 2004)