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Frank W. Lemire\* (lemire@uwindsor.ca), Department of Mathematics and Statistics, University of Windsor, Windsor, Ontario N9B 3P4, Canada, and Daniel J. Britten and Justin Lariviere. Decomposition of Tensor Products of Torsion Free  $C_n$ -modules of finite degree and simple finite dimensional modules. Preliminary report.

In this talk we provide a formula for the decomposition of the tensor product of any simple torsion free  $C_n$ -module of finite degree with a simple finite dimensional module. This result is used to provide a new formula for the decomposition of the tensor product of two simple finite dimensional  $C_n$ -modules. (Received September 17, 2004)