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**Kevin Gerstle\*** ([kevin-gerstle@uiowa.edu](mailto:kevin-gerstle@uiowa.edu)), Department of Mathematics, University of Iowa, Iowa City, IA 52242. *Green Rings of Pointed, Coserial Hopf Algebras*. Preliminary report.

Let  $k$  be an algebraically closed field with characteristic not equal to 2. By using the multiplication and comultiplication operations of a  $k$ -Hopf algebra  $H$ , one can induce a comodule structure on the direct sum and tensor product of two  $H$ -comodules. In this way, a ring structure called the Green ring  $r(H)$  can be induced on the space of isomorphism classes of finite-dimensional comodules of  $H$ . In this talk, I will discuss the Green ring structure for a class of pointed, coserial Hopf algebras and show how by decomposing the tensor product of comodules into the direct sum of indecomposables, the corresponding Green rings for these Hopf algebras can be expressed as quotients of integer polynomial rings. (Received August 23, 2015)