

1093-05-277

**Nantel Bergeron\*** (bergeron@yorku.ca), **C Benedetti**, **N. Thiem** and **M. Aguiar**.

*Categorification of Combinatorial Hopf Algebras, symmetric functions in noncommutative variables.*

The space of symmetric functions (in commutative variables) plays a central role in mathematics and representations theory. It can be understood as the Grothendick group of the category of the symmetric groups modules. Further Categorification of this space was established by understanding the functors corresponding to the endomorphisms of the space of symmetric functions.

I will be interested in the space of symmetric functions in noncommutative variables. I will show it could be understood as the Grothendick group of the category of upper triangular groups over finite fields-modules.

This is part of a general quest to categorify certain family of combinatorial Hopf algebras. (Received August 18, 2013)