

**EXAMPLES OF NON-SEMISIMPLE HOPF  
ALGEBRA ACTIONS ON ARTIN-SCHELTER  
REGULAR ALGEBRAS**

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**Time: Fri, Dec. 20, 09:30-11:30**

**Venue: Room 110, SCMS**

**Abstract:** Let  $k$  be a base field of characteristic  $p > 0$  and let  $U$  be the restricted enveloping algebra of a 2-dimensional nonabelian restricted Lie algebra. We first study the representations of  $U$  and describe the Green ring of  $U$ . Then we classify all innerfaithful  $U$ -actions on noetherian Koszul Artin-Schelter regular algebras of global dimension up to three. This is a joint work with Dingguo Wang and James J. Zhang.