

1137-16-54

Jonas T Hartwig* (jth@iastate.edu). *Gelfand-Zeitlin modules over Galois orders.*

Galois orders form a class of noncommutative algebras introduced by Futorny and Ovsienko in 2010. Examples include enveloping algebras, truncated Yangians, finite W-algebras, and orthogonal Gelfand-Zeitlin algebras of type A. In this talk we present new techniques which allows us to prove that quantum analogs as well as parabolic generalizations of the mentioned examples are also Galois orders. In addition, the new approach provides a natural way to construct canonical simple Gelfand-Zeitlin modules over these algebras, generalizing recent results by several different authors. (Received January 22, 2018)