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Maria D. Vega* (maria.vega@usma.edu), West Point, NY 10996. *Cocycle deformations and Galois objects for semisimple Hopf algebras of dimension p^3 .*

Let p be a prime numbers. In this talk will discuss Galois objects and cocycle deformations of the noncommutative, noncocommutative, semisimple Hopf algebras of odd dimension p^3 . We obtain that the $p + 1$ non-isomorphic self-dual semisimple Hopf algebras of dimension classified by Masuoka have no non-trivial cocycle deformations, extending his previous results for the 8-dimensional Kac-Paljutkin Hopf algebra. This is joint work with A. Castaño, S. Montgomery, S. Natale, and C. Walton. (Received September 25, 2017)