

1025-57-143

J. Scott Carter, Alissa Crans, Mohamed Elhamdadi and Masahico Saito*

(saito@math.usf.edu). *Relations among algebraic cohomology theories and applications.*

In this talk, we explain relations between Lie algebra cohomology, quandle cohomology, and adjoint cohomology of Hopf algebras. A unified view is given in terms of coalgebra structures. Applications to the Yang-Baxter equation and interpretations in terms of knot diagrams are discussed. (Received January 21, 2007)