CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, December 3
2:00 – 3:00 PM
Maria Sanford, Room 101

G-FROBENIUS ALGEBRAS, CATEGORY THEORY AND TWISTS

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Abstract: In this talk, I present some recent results concerning G-Frobenius algebras (G-FAs) and their twists. One of the main results is a new categorical view of G-FAs (from joint work with R. Kaufmann) that links G-FAs to a particular quasitriangular Hopf algebra. In addition to this, I show that G-FAs can be viewed as a special case of a more general algebraic structure. A nice consequence of this generalization is its surprising usefulness to the problem of twisting G-FAs. More specifically, I show how this generalized structure can be used to significantly extend a previous twisting result for G-FAs.

*This talk is largely self-contained and assumes no prior knowledge of G-FAs or Hopf algebras.