



Announcing

**A Colloquium Presentation
January 16, 2009 at 2:00 pm
Southern Hall 303**

at The University of Southern Mississippi

Speaker: Justin Gash

Department of Mathematics and Computing
Franklin College

Title: From Buchberger to Faugère

Abstract:

In 2002 J.C. Faugère introduced a new algorithm for computing Gröbner Bases, called F5. F5 uses data constructs called signatures in order to achieve improvements over the Buchberger Algorithm's runtime, often running 10 times faster.

In this talk I will introduce what a signature is, including normalized signatures and admissible signatures. Then I will state Faugère's new Gröbner Basis criterion. Finally, I will discuss my recent work and work being done by others, specifically John Perry and Christian Eder.

This talk will be accessible to anyone who has attended John Perry's recent talk, "From Gauss to Gröbner."

Further Information

Further details and information about this and other departmental activities is available online at http://www.math.usm.edu/bulletin_board/.