Announcing
A Computational Science Seminar
Friday, October 28th at 2:00 pm
TEC 205
at The University of Southern Mississippi

Speaker: Karen Kohl
Department of Mathematics
University of Southern Mississippi

Title: The Method of Brackets

Abstract:
In spite of being a classical problem, the current techniques available for symbolic integration in software such as Mathematica are not sufficient to evaluate some quartic integrals or some integrals of functions of mathematical physics, such as Bessel functions.

The Method of Brackets, a heuristic process appearing in the evaluation of Feynman diagrams, can be used to evaluate symbolically a large class of single or multiple definite integrals. A Sage implementation allows for experimentation and testing against the Gradshteyn-Ryzhik Table of Integrals. Such experimentation has suggested modifications of the original rules.

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