



PURDUE UNIVERSITY

Department of Mathematics Colloquium

Speaker: Professor Vladimir Peller, Michigan State University
Title: "Multiple Operator Integrals and Higher Operator Derivatives"
Date: Tuesday, October 17, 2006
Time: 4:30 P.M.
Place: MATH 175

Abstract

I am going to consider the problem of the existence of higher derivatives of the function $t \mapsto f(A + tK)$, where f is a function on the real line, A is a self-adjoint operator, and K is a bounded self-adjoint operator. Earlier results on the existence of higher derivatives will be considerably improved. In order to do this, I'll present a new approach to multiple operator integrals that is based on integral projective tensor products of L^∞ spaces.. A similar problem for functions of unitary operators will also be considered.

Refreshments will be served in the Math Library Lounge, 4:00 P.M.