

COLLOQUIUM SPEAKER SERIES
Mathematics and Computer Sciences

Wednesday October 21, 2009
12:00-12:50, room A580



Dr. Michael P. Lamoureux

Professor, Mathematics and Statistics
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BIO:

Ph.D., 1988, University of California, Berkeley
M.Sc., 1983, Stanford University
B.Sc., 1982, University of Alberta

PROPERTIES OF GABOR MULTIPLIERS
FOR PHYSICAL MODELING.

Abstract

We present techniques developed for numerical modeling of wave propagation, and source-signature removal in seismic imaging, based on a class of linear operators known as Gabor multipliers. These operators are localized Fourier multipliers, whose actions is selectively localized by an element of a partition of unity. We discuss boundedness and stability properties for these operators, approximations to PDEs and pseudodifferential operators, and an approximate functional calculus.

EVERYONE IS WELCOME TO ATTEND!

BIO OF THE SPEAKER:

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B.Sc., 1982, University of Alberta

HIS RESEARCH INTERESTS:

Functional analysis, C^* -algebras,

noncommutative geometry,

nonselfadjoint operator algebras, C^* -dynamical systems,

mathematics of wave propagation and seismic imaging,

numerical methods and applications to geophysics.