

# Colloquium

November 14, 2008

4:10 pm

Surge 284

*Tea Time will be at 3:40*

Herbert Heyer

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## “Martingale Characterizations of Stochastic Processes in Hypergroups”

Abstract: The talk will be concerned with Levy-type characterizations of nonhomogeneous processes having independent increments in a generalized convolution structure. Such structures, called hypergroups, comprise double coset spaces arising from groups such as motion groups (Bessel-Kingman), Lorentz groups (Jacobi), and special orthogonal groups (Gegenbauer). Methodially one applies harmonic analysis developed for hypergroups in order to study increment processes in terms of their corresponding convolution hemigroups. The results to be presented are related to the well-known martingale problem; they will appear in a recent paper written jointly with Gyula Pap.