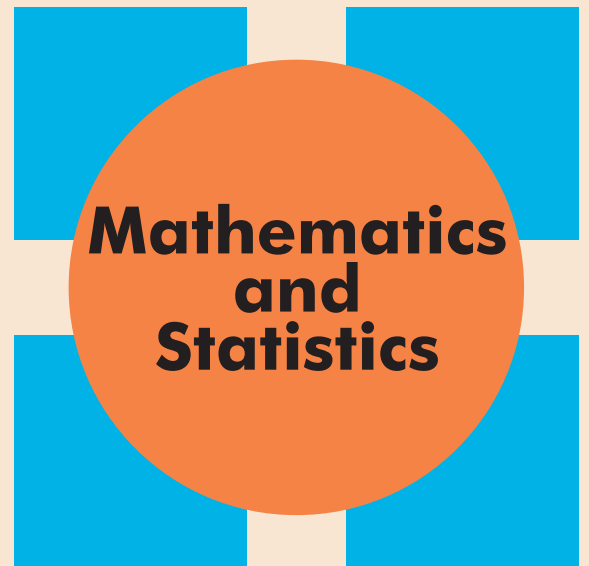


COLLOQUIUM

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On Wishart Process and Sovereign Credit Risk Modeling



Date: Friday, November 21, 2014

Time: 3:30 - 4:30 PM

Room: RIC 209

Abstract: The Wishart process, multivariate extension of the Cox-Ingersoll-Ross (CIR) process, has recently got attention in financial modeling due to its special characteristics. In this talk, I will discuss about the CIR and the matrix variate Wishart process and the derivation of moments of the process using matrix calculus method. Then application of the Wishart process in sovereign credit risk modeling will be discussed, with special interest in structural model and the solution due to the exponential affine. Finally, challenges facing during the numerical derivation of exponential structure of the stochastic form of the matrix and the problems and restrictions while calibrating the model due to the matrix form exist in the structure will be discussed.