El Departamento de Estadística del ITAM

anuncia la siguiente sesión de

EL SEMINARIO ALEATORIO

que con el título

On the alternative model of volatility studies

será impartida por el

Prof. Jasek Leskow Institute of Mathematics Technical University of Wroclaw, Poland and CIMAT Guanajuato, Gto.

ABSTRACT

Recent years have seen an outburst in the number of papers related to the study of volatility, variance, conditional variance and higher-order characteristics related to the econometric time series. Various modifications of classicial ARMA, ARIMA, ARCH and GARCH models have been proposed. Most of them, however, by-pass the basic question that one asks while analyzing econometric times series models, this question being: Is it true that the time series is stationary?

To provide tests for stationarity one needs to create a wider framework for analysis. In such a framework the condition of stationarity will be only a special case. One of the purposes of the lecture is to provide such framework, based on the class of nonstationary, almost periodically correlated time series. It will be also discussed how the linear structure of autoregressive models creates a false alternative for studying variance, that is a limited choice between constant and explosive variance models. The model proposed avoids that problem by not explicitly specifying the structure of the model error, focusing only on estimating its variance-covariance.

We will show properties of estimators derived in the proposed model and the new spectral theory for analysis of time series. Practical applications will involve tests of stationarity and analysis of Value at Risk calculation under lack of stationarity.

Fecha: Viernes 27 de Noviembre Hora: 16:00 Lugar: Salón 311, Río Hondo

El Seminario Aleatorio está destinado tanto a profesores como a estudiantes por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.