Departamento Académico de Estadística

El Departamento Académico de Estadística del ITAM

anuncia la siguiente sesión (No. 233) de

EL SEMINARIO ALEATORIO

que, con el título

A semiparametric Bayesian approach to extreme value estimation

Impartirá

Dr. Dani Gamerman
Universidad Federal de Río de Janeiro
Profesor visitante, ITAM

Resumen

This talk is concerned with extreme value density estimation. The generalized Pareto distribution (GPD) beyond a given threshold is combined with a nonparametric estimation approach below the threshold. This semiparametric setup is shown to generalize a few existing approaches and enables density estimation over the complete sample space.

Estimation is performed via the Bayesian paradigm, which helps identify model components. Estimation of all model parameters, including the threshold and higher quantiles, and prediction for future observations is provided. Simulation studies suggest a few useful guidelines to evaluate the relevance of the proposed procedures. They also provide empirical evidence about the improvement of the proposed methodology over existing approaches. Models are then applied to environmental data sets. The talk is concluded with a few directions for future work.

(Joint work with Fernando F. Nascimento and Hedibert F. Lopes)

Fecha: Viernes 17 de Febrero de 2012
Hora: 13:00 hrs.
Salón:Salón B-1, Plantel Río Hondo
Lista de seminarios próximos. Visite:

http://estadistica.itam.mx/seminarios.html

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.

Trinidad Martínez
ITAM
Depto. Académico de Estadística
Rio Hondo # 1,
Col. Progreso Tizapán
C.P. 01080 México, D. F.
Tel. 5628-4000 ext. 3803
Fax 5628-4086
E-mail: trinidad@itam.mx