El Departamento de Estadística del ITAM

anuncia la siguiente sesión de

EL SEMINARIO ALEATORIO

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INFERENCE UNDER PARTIAL INFORMATION ON OBSERVABLE RANDOM VARIABLES

Elías Moreno
Universidad de Granada, España

ABSTRACT

Partial prior information on the unkown marginal distribution of an observable random variable X is considered. The direct way of incorporating this prior information into the statistical analysis of an assumed parametric model $\boxed{}$, is through the well-known generalized moments class of prior distributions for the parameter.
We argue that typically this class is either empty or very large. In the former case we should conclude that the selected sampling model cannot match the prior information on the predictive density and, consequently, an alternative sampling model should be considered. In the latter case, the model is compatible with the prior information but posterior robustness of a given quantity of interest is a specified function, in generally not achieved.
Thus, a subclass of priors to overcome the lack of robustness of the generalized moments class should be constructed. We construct such a subclass by considering the standard improper default prior associated to the sampling model, and the intrinsic procedure. Posterior Bayesian robustness of this subclass is analyzed and some illustrative examples are provided.
Key words: generalized moments class, intrinsic priors elicitation, quantiles, unimodality.

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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.