Departamento Académico de Estadística

El Departamento de Estadística del ITAM

anuncia la siguiente sesión de

EL SEMINARIO ALEATORIO

que con el título

Bayesian Group Decisions

Impartirá

Dolores Sánchez
University of Kent

RESUMEN

Decision making is of great importance to everyone. The problem of group decision making is more complex than the individual case. In a democratic setup the usual way to arrive to a group decision is voting. Such is the case of a jury, electing a government, the policies that the government or corporations should undertake, medical committees deciding if a drug should be used. etc.

In Bayesian Statistics the theory developed for decision making is prescribed mostly for individual choice, some attempts have been made to produce a Bayesian Group Decision Theory. Following individual decision theory the best action is the one that maximizes the expected utility. However, individuals do not satisfy the "rationality" axioms of this principle showing inconsistencies. The flaw of existing individual and group theory, is that both are normative, and fail to describe how the decision makers do behave.

This work attempts to develop a descriptive and coherent group decision theory.

Since members of the committee may have different utility functions and prior beliefs on the occurrence of events it is difficult to arrive to a common decision. Then, they first have to agree on a common utility function and a prior distribution of beliefs.

Random Utility Models are an alternative way to describe choice behavior. This model assumes the utility function $U(a, F)$, is maximized for certain action [ ] when F [ ] and $F \sim \Pi(dF)$. Therefore, the distribution of F induces a distribution of decisions. In a group setup, when the distribution of decisions is interpreted as the proportion of people who believe F [ ], the coherent decision is to choose the mode (when it is true that F [ ])

Fecha: Viernes 27 de Enero
Hora: 12:50 hrs.
Salón: Sala de Videos 2 - 2º. Piso Biblioteca

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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.

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