



## Volume 28, Issue 36

### Conference Announcement

#### Stochastic methods in game theory

Location : Erice

Organizers : Marco Scarsini

Major Topics : Game theory

Conference Dates : 9/24/2005 to 9/24/2005

Submission Deadline : 2/28/2005

Send Submissions To : marco.scarsini@unito.it

Sponsoring Organizations :

For further information contact :

Web Page : <http://web.econ.unito.it/scarsini/Erice2005>

This workshop aims at giving an overview of the interaction between stochastic methods and game theory. Probability is central in the theory of choice under uncertainty. In game theory, where several decision makers interact, the presence of uncertainty adds a further complication, since different players could have different opinions, and therefore employ different probability measures to make their strategic decisions. The relatively recent consideration that economic agents do not have infinite cognitive abilities and do not possess full information about their environment raises new challenges, that need a treatment through advanced and innovative mathematical tools. The conference will put a special emphasis on the following topics: - Bounded Rationality: Models from Computer Science such as Automata or Turing Machine are used as a representation of agents with limited cognitive abilities. - Asymmetric Information: The modeling of asymmetric information and the study of games with incomplete information relies on tools from probability theory and information theory. - Learning: We consider agents both bounded or unbounded rationality which may ignore other's strategies at the beginning, but learn them through the course of interaction. The spectrum of the meeting will be broad, ranging from foundational issues to technical probabilistic tools to applications in economics, computer science, statistics, and operations research. The speakers will be young international scholars who are active in various areas of the above fields. They will survey the recent advances in the discipline, describe their own contributions, and bring the audience to some open problems and possible research topics.