



# *New Directions in Financial Mathematics*

● January 5 - 9, 2010

ORGANIZING COMMITTEE: **Rene Carmona** (Princeton University), **Jaska Cvitanic** (California Institute of Technology), **Nicole El Karoui** (École Polytechnique), **George Papanicolaou** (Stanford University), **Eduardo Schwartz** (UCLA), **Ronnie Sircar** (Princeton University), **Thaleia Zariphopoulou** (University of Texas Health Science Center and Texas Heart Institute)

● **Scientific Overview**

This workshop will bring together accomplished experts, graduate students and young researchers interested in the most recent global developments of quantitative finance in both industry and academia. Experts will present state of the art topics in new developing areas of financial mathematics.

The workshop will introduce young researchers and more accomplished mathematicians to two new and exciting fields of research: environmental emissions markets and mathematical models for financial markets. Among the many prestigious talks, two short courses will also be presented. Rene Carmona (Princeton University) will present a short course on the major challenge of the environment and the worldwide attempts to use financial markets to control emissions of green house gases in the most efficient way. Pierre-Louis Lions (Collège de France and Ecole Polytechnique) will also present a short course on agent-based models for financial markets.

A poster session will be organized for PhD students to present their research, and special guests will join invited participants on a panel to discuss the state of the reformed financial markets and the role that mathematical education and academic research should play in this new arena.

● **Confirmed Speakers**

**Yves Achdou** (Université de Paris VII (Denis Diderot) et Université de Paris VI (Pierre et Marie Curie)), **Christian Bender** (Technische Universität Carolo Wilhelmina zu Braunschweig), **Rene Carmona** (Princeton University), **Umet Cetin** (London School of Economics and Political Science), **Nicole El Karoui** (École Polytechnique), **Jean-Pierre Fouque** (UC Santa Barbara), **Chris Harris** (University of Cambridge), **Juri Hinz** (National University of Singapore), **Ulrich Horst** (Humboldt-Universität), **Sam Howison** (University of Oxford), **Pierre-Louis Lions** (Collège de France and Ecole Polytechnique), **Michael Ludkovski** (UC Santa Barbara), **Jin Ma** (University of Southern California), **Alexander Schied** (Technische Universität München), **Christophe Schwab** (ETH Zürich), **Mete Soner** (Sabanci University), **Nizar Touzi** (École Polytechnique), **Thaleia Zariphopoulou** (University of Texas Health Science Center and Texas Heart Institute)

● **Participation**

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

● [www.ipam.ucla.edu/programs/fin2010](http://www.ipam.ucla.edu/programs/fin2010)



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