



InterSymp-2005

17th International Conference on Systems Research, Informatics and Cybernetics

to be held

August 1st - August 7th, 2005
in Baden-Baden, Germany

announces

3rd Special Focus Symposium on Catalactics: Quantitative Modelling of Human Market Interactions

August 1 - 2, 2005

Joint Symposium Chairs:



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Conference Chair:



Prof. Dr. George E. Lasker

President of The International Institute for Advanced Studies
in Systems Research & Cybernetics (IIAS), University of Windsor, Windsor, Canada
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Focus of the Symposium

The paradigms in finance are on the brink to change (cf. Ross 2004): the major assumptions of neoclassical finance are obviously not consistent with the facts and figures characterising reality grasped by the data and methods available today. Two aspects need to be addressed: the one is the decision-making based on the *rational man* assumption and the other is the *no arbitrage* assumption.

The first ignores the circumstances caused by the decision-making by individuals; the necessity to regard these behavioural aspects led to behavioural finance. The importance of behavioural/psychological aspects was already underlined by scholars like von Hayek a long time ago. Von Hayek's arguments, however, suffered from the absence of a formal treatment. The eschewal of formal tools also endangered the behavioural finance approach. Discrete choice models do offer a methodology to treat psychological aspects formally. (cf., esp., McFadden 1999).

The *no arbitrage* assumption ignores the existence of and the effects generated by markets: the major deficiencies might be characterised by the neoclassical procedure to search for arbitrage opportunities by methods that are grounded on the assumption that there do not exist arbitrage opportunities. The importance of markets has been known long before the predominance of the neoclassical paradigm. The appropriate term has been catallactics – quite in use since the 1920s – and has been rediscovered by those dissatisfied with the shortcomings of the neoclassical theory. Buchanan (2001) has raised the postulate of observing catallactics again and has called for *mathematics of economic interactions* instead of *mathematics of optimisation*.

We apply the term catallactics announcing the 3rd Special Focus Symposium, even if our call is meant to encourage particularly, but is not limited to, the submission of papers addressing both aspects with a combined methodology.

Cited Literature

- Buchanan, J.M. (2001): Game theory, mathematics, and economics, *Journal of Economic Methodology* 8, pp. 27-32.
- McFadden, D. (1999): Rationality for Economists?, *Journal of Risk and Uncertainty* 19, pp. 73-105.
- Ross, S. (2004): A Neoclassical Look at Behavioural Finance, IMA Public Lecture Series, Institute for Mathematics and its Application, University of Minnesota, March 30, 2004.

Topics may include, but are not limited to:

- Interactive agent-based modelling of dynamic market processes
- Human learning and decision-making on markets
- Emergent impact of market microstructure on market outcomes
- Non-equilibrium asset pricing
- Evaluation of discrete activities



Call for Papers

Papers that address any of the above listed issues are invited. An abstract of approximately 200 words should be submitted for evaluation. All proposals will be judged on the basis of their scholarly quality, originality and potential for further discourse.

Abstracts may be submitted electronically (Microsoft Word preferred) or by mail until March 30, 2005 to:

Prof. Dr. Vladimir Šimović, Joint Symposium Chair

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with a copy to: **Prof. Dr. George E. Lasker**, Conference Chair

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Review Process and Conference Proceedings

All submitted abstracts will be peer-reviewed. Final papers should not exceed 5 single-spaced typed pages prepared according to the Instruction to Authors given at the website <http://www.ias.edu> and <http://ias.uazg.hr>.

All selected papers will be published in Conference Proceedings.

Important Dates

Abstract due: March 30, 2005

Notification of acceptance: April 9, 2005

Final paper due: May 9, 2005

Further details on InterSymp-2005 are available at

<http://www.ias.edu> and <http://ias.uazg.hr>.

The Special Focus Symposium is sponsored by
The International Institute for Advanced Studies in
Systems Research and Cybernetics
&
Systems Research Foundation