SCIENTIFIC EVENTS

6th International Workshop on Parallel Applications in Statistics and Economics PASE'97 Computers in Finance and Economics Mariánské Lázně, Czech Republic November 9-12, 1997

The workshop was organized by the Swiss Center for Scientific Computing (ETH Zurich), Academy of Sciences and University of Economics (Prague), Finance Online (ETH spin-off company, Zurich), and Olsen & Associates (Research Institute for Applied Economics, Zürich). It was held at Mariánské Lázně (former Marienbad), one of the world's most beautiful and most visited spa-towns. The PASE'97 host organisation was the Academy of Sciences of Czech Republic.

The purpose of this workshop was to bring together researchers interested in innovative information processing systems and in their applications in the fields of statistics, finance and economics. An in-depth presentation of the state-of-the-art in methods and applications, and reporting on current research topics were the main objectives of the event. The workshop addressed to all industrial and academic people who would investigate new ways of working with computers in finance and economics. An enumeration of the subjects dealt with will include:

- Statistical methods for data analysis and forecasting
- Neural networks in finance and econometrics
- Risk management applications
- Real time decision support systems
- Banking and financial information on the Internet

The 1997 workshop came after a successful series of workshops held in Trier/Mainz on a Mosel/Rhine boat tour (1995), Ascona (1993), Prague (1992), Zürich (1991) and Dublin (1990). The workshop is the only one of its standing in Europe, which proposes a highly scientific look on interdisciplinary and innovative concepts in new information processing technologies.

The Organizing and Program Committees included well-known personalities from academia, industrial, banking and financial institutions: ETH (Zürich), Academy of Sciences and University of Economics (Prague), Erasmus University (Rotterdam), Generale Bank (Brussels), Olsen & Associates (Zurich), Oxford Forecasting Services (Oxford), Bank Sal Oppenheim (Francfort), IBM (Zurich), Siemens AG (Munich), etc.

The workshop included *in-depth presentation of contributions and selected shorter contributed talks on current research projects, to be supplemented by poster sessions, discussions and brainstorming sessions.*

Here are some titles of the former:

- Financial Model Definition and Execution in a Real Time System (P. Cianchi, G. Congiu, G. Delta Lunga, L. Landi, A. Piattoli, Universitá di Firenze and Quasar S.p.a. Firenze)
- How Non-linear is your Time Series? A New Method and a Case Study (G. Darbellay and M. Slama, Institute of Computer Science, Prague)
- Neural Network Directed Trading in Financial Markets Using High Frequency Data (M. Mehta, Citibank, Bombay and Saudi American Bank, Riyadh)
- SONNET: Sal Oppenheim Neural Trader (M. Miksa, Bank Sal Oppenheim, Francfort)
- Developing Forecasting Models for Integrated Financial Markets Using Artificial Neural Networks (Th. Podding, Department of Finance, University of Bremen)
- A Real-time Computer Simulation of a Foreign Exchange Trading Room (R. Schnidrig, D. Würtz, M. Hanf, Finance Online GmbH and Swiss Center for Scientific Computing, ETH Zurich)
- Perception by Neural Networks (J.G. Taylor, Department of Mathematics, University of London)

The selected shorter contributed talks included the following sessions:

- Time Series Analysis I
- Time Series Analysis II
- Neural Networks
- Computer Simulations
- Foreign Exchange Modeling
- Risk Management

The participants represented both academia and industry. Generally, the presentations were highly technical and anchored in mathematics or natural sciences. In keeping up with the tradition of PASE workshops, a sightseeing tour as well as other agreeable social events were organized.

The presentations were made available to a broader audience by their being published in a special Volume titled "*Computers in Finance and Economics - Abstracts and Selected Papers*", and by commentaries in a special issue of *Neural Network World - International Journal on Neural and Mass-Parallel Computing and Information Systems*, edited by the Academy of Sciences of Czech Republic.

The next PASE Workshop will be held in Brussels in 1999.

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