

PRELIMINARY PROGRAM

Spring 2004 SCOPES Project Meeting

Technical University of Gabrovo, Bulgaria
March 06 - 09, 2004

Saturday, March 6: Arrival day

Sunday, March 7:

08:00 – 09:00 Breakfast
10:00 Excursion to Bojentsi and Etar

Monday, March 8:

07:45 – 08:45 *Breakfast*
09:00 – 09:30 P. Arbenz, On the Tacoma bridge collapse.
09:30 – 10:00 T. Zlatanovski, Demonstration and short discussion of several fluid mechanical problems that we have solved using *Mathematica*.
10:00 – 10:15 *Break*
10:15 – 10:45 V. Atanasov, S. Poryazov, Interactive Terminal Teletraffic Modelling in the Internet. Base Concepts and Current Solutions.
10:45 – 11:15 I. Simeonov, Modelling, Analytical Studies and Simulation of the Anaerobic Digestion of Organic Wastes
11:15 – 11:30 *Break*
11:30 – 12:00 VI. Slavov, S. Dimova: Phase-Field Method for Modeling Dendritic Growth and Interaction in 2D
12:00 – 12:30 J. Markovski, Tests for PRNG by random walks on torus
Lunch
14:00 – 14:20 S. Dodunekov: Master programs in IMI – BAS.
14:20 – 14:40 S. Margenov, Large-Scale Scientific Computations in Master Curriculum on Numerical Methods and Algorithms at Faculty of Mathematics and Informatics, Sofia University.
14:40 – 15:00 V. Dimitrov: CSE in Master Curriculum on Information Systems at Faculty of Mathematics and Informatics, Sofia University.
15:00 – 15:20 *Break*
15:20 – 15:40 S. Markov, I. Mirchev, P. Milanov, B. Yurukov, Master Program "Biomathematics, Ecology and Scientific Computations".
15:40 – 16:00 M. Yovanov, Usage of the project equipment for CSE purposes.

16:15 – 18:00 SCOPES Business Meeting, Progress Reports of the Partners in the Project

20:00 *Official dinner*

Tuesday, March 9:

07:45 – 08:45 *Breakfast*
09:00 – 09:30 W. Gander, A Shape Distance for CAD-Described Surface.
9:30 – 09:50 S. Georgievska: Calculation of numerical properties of Markov chains in *Mathematica*.
09:50 – 10:10 M. Mihova: *Mathematica* in the educational process at the Institute of Informatics.
10:10 – 10:20 *Break*
10:20 – 10:40 E. Metodieva, D. Izvorska, S. Kapralov, R. Daskalov, Mathematical education at TU-Gabrovo using Maple.
10:40 – 11:00 I. Trenchev, P. Milanov, Scientific computer engineering. Cooperation between Optimization Toolbox in Matlab and Tomlab.
11:00 – 11:20 S. Markovski, Construction of quasi-groups of huge order.
11:20 – 11:30 *Break*
11:30 – 11:50 V. Bakeva, Quasi-group based error-detecting codes.
11:50 – 12:10 S. Kapralov, Error-correcting codes – bounds, constructions and enumeration.
12:10 – 12:30 R. Daskalov, One-generator quasi-cyclic codes.
Lunch

Tuesday afternoon, March 09: departure