Scientific Programme

Friday, September 29, 2000 – Lecture Hall W221:

09:00 – 09:30 Opening

09:30 – 10:20 Gill, Philip E. (University of California, San Diego) Recent Developments in Large-Scale Nonlinear Optimization.

10:30 – 11.00 Coffeebreak

11:00 – 12:30 Parallel sections in seminar rooms W121, W122, W220, and W222


15:00 – 15:50 van Rienen, Ursula (University of Rostock) Some Considerations on Solving Linear Systems of Equations in Computational Electrodynamics.

16:00 – 16:30 Coffeebreak

16:30 – 18:00 Parallel sections in seminar rooms W121, W122, W220, and W222

18:00 – 18:50 Sonar, Thomas (Technical University of Braunschweig) A Fresh Look at Artificial Dissipation and Entropy Production.
Friday, September 29, 2000 – Seminar Room W121:

09:00 – 09:30  Opening (Lecture Hall W221)
09:30 – 10:20  P. E. Gill, (Lecture Hall W221)
10:30 – 11.00  Coffebreak
11:00 – 11:25  **Berrut, Jean-Paul** (University of Fribourg)
The Linear Rational Collocation Method with Iteratively Optimized Poles for Two-Point Boundary Value Problems.
11:30 – 11:55  **Ignatyev, Alexander O.** (University of Donetsk)
On the Stability of a Linear System with Linear Parameters.
12:00 – 12:25  **Ignatyev, Alexey A.** (University of Donetsk)
On Optimal Stabilization of Almost Periodic Systems.
12:30 – 13:20  H. J. Pesch, (Lecture Hall W221)

15:00 – 15:50  U. van Rienen, (Lecture Hall W221)
16:00 – 16.30  Coffebreak
16:30 – 16:55  **Yamai, Hiroshi** (KEIO University, Yokohama)
Two Differential Equation Models in Hydrology - Draught in Aral Sea and Floods in Bangladesh.
17:00 – 17:25  **Schneider, Klaus R.** (Weierstrass Institute for Applied Analysis, Berlin)
Excitability of Lasers.
17:30 – 17:55  **Radzumas, Mindaugas** (Weierstrass Institute for Applied Analysis, Berlin)
Modelling of Multisection Semiconductor Laser.
18:00 – 18:50  T. Sonar, (Lecture Hall W221)
Programme

Friday, September 29, 2000 – Seminar Room W122:

09:00 – 09:30  Opening (Lecture Hall W221)
09:30 – 10:20  P. E. Gill, (Lecture Hall W221)
10:30 – 11:00  Coffeebreak
11:00 – 11:25  Hofferek, Birgit  (Technical University of Hamburg-Harburg)
               Eigenvalue Reanalysis and Condensation With General Masters.
11:30 – 11:55  Voß, Heinrich  (Technical University of Hamburg-Harburg)
               A Variant of the Inverted Lanczos Method.
12:00 – 12:25  Karlsson, Per W.  (Technical University of Denmark, Lyngby)
               The Conducting Disk.
12:30 – 13:20  H. J. Pesch, (Lecture Hall W221)

15:00 – 15:50  U. van Rienen, (Lecture Hall W221)
16:00 – 16:30  Coffeebreak
16:30 – 16:55  zu Castell, Wolfgang  (University of Erlangen-Nuremberg)
               ||·||₁-radial, Positive Definite Functions.
17:00 – 17:25  Klein, Peter  (Technical University of Clausthal)
               Minimal Norms of Positive Irreducible Operators.
17:30 – 17:55  Lasser, Rupert  (GSF - National Research Center for Environment and Health, Neuherberg)
               On the Construction of Approximation Kernels for Orthogonal Polynomial Expansions.
18:00 – 18:50  T. Sonar, (Lecture Hall W221)
Friday, September 29, 2000 – Seminar Room W220:

09:00 – 09:30 Opening (Lecture Hall W221)
09:30 – 10:20 P. E. Gill, (Lecture Hall W221)
10:30 – 11:00 Coffeebreak
11:00 – 11:25 **Callies, Rainer** (Technical University of Munich)
Stabilized Optimal Control with Applications in Aerospace Engineering.

11:30 – 11:55 **Quapp, Wolfgang** (University of Leipzig)
Searching Stationary Points of an N-dimensional Surface
by a Valley Following Method - A Robust Method.

12:00 – 12:25 **Spedicato, Emilio** (University of Bergamo)
ABS methods and ABSPACK.

12:30 – 13:20 H. J. Pesch, (Lecture Hall W221)

15:00 – 15:50 U. van Rienen, (Lecture Hall W221)
16:00 – 16:30 Coffeebreak
16:30 – 16:55 **El Manjli, Abdelouahed** (Fès University)
On the Navier-Stokes Equations.

17:00 – 17:25 **Morozov, Nikita** (St. Petersburg University)
A Mathematical Description of the Distribution of Pores
in a Strained, Elastic Solid.

17:30 – 17:55 **Bratkov, Yuri** (Moscow State University)
Geometric Modeling in Mythology.

18:00 – 18:50 T. Sonar, (Lecture Hall W221)
Friday, September 29, 2000 – Seminar Room W222:

09:00 – 09:30 Opening (Lecture Hall W221)
09:30 – 10:20 P. E. Gill, (Lecture Hall W221)
10:30 – 11.00 Coffeebreak

11:00 – 11:25 **Bastian, Marion** (Technical University of Dresden)
Range Restricted Hermite Interpolation by Parametric Quadratic Splines on Powell-Sabin Refinements.

11:30 – 11:55 **Micula, Gheorghe** (Babeș-Bolyai University, Cluj-Napoca)
New and Old Aspects of Spline Function Theory.

12:00 – 12:25 **Kolumban, J.** (Babeș-Bolyai University, Cluj-Napoca)
On the Ky Fan Minimax Equation.

12:30 – 13:20 H. J. Pesch, (Lecture Hall W221)

15:00 – 15:50 U. van Rienen, (Lecture Hall W221)
16:00 – 16.30 Coffeebreak

16:30 – 16:55 **Iričanin, Bratislav D.** (University of Belgrade)
A Note on a Clothoid and the Gamma Function.

17:00 – 17:25 **Meyer-Spasche, R.** (MPI für Plasmaphysik, Garching)
Runge-Kutta Schemes as Exact Schemes.

17:30 – 17:55 —

18:00 – 18:50 T. Sonar, (Lecture Hall W221)
Saturday, September 30, 2000 – Lecture Hall W221:

09:00 – 09:50  Troger, Hans  (Technical University of Vienna)

10:00 – 10.30  Coffeebreak

10:30 – 12:00  Parallel sections in seminar rooms W121, W122, and W220

12:00 – 12:50  Yserentant, Harry  (University of Tübingen)
The Finite Mass Method.

Saturday, September 30, 2000 – Seminar Room W121:

09:00 – 09:50  H. Troger, (Lecture Hall W221)

10:00 – 10.30  Coffeebreak

10:30 – 10:55  Koshelev, Alexander  (University of St. Petersburg)
On Some Non-Linear Problems in the Theory of Elasticity.

11:00 – 11:25  Janovská, Drahoslava  (Prague Institute of Chemical Technology)
A the Numerical Analysis of Imperfect Symmetry-Breaking Bifurcation Problems.

11:30 – 11:55  Janovsky, Vladimir  (Charles University Prague)
On a 1-D Model of Stress Relaxation in a Solidifying Glass.

12:00 – 12:50  H. Yserentant, (Lecture Hall W221)
Saturday, September 30, 2000 – Seminar Room W122:

09:00 – 09:50  H. Troger, (Lecture Hall W221)
10:00 – 10:30  Coffeebreak

10:30 – 10:55  Coppola, Gennaro  (University of Napoli Federico II)  
Interpolation and Reconstruction Problems Correlated to Compact Schemes.

11:00 – 11:25  Shevchuk, Igor A.  (National Taras Shevchenko University of Kyiv)  
On Coconvex Polynomial Approximation.

11:30 – 11:55  Markov, Svetoslav  (University of Sofia)  
On the Algebra of Convex Bodies and Errors.

12:00 – 12:50  H. Yserentant, (Lecture Hall W221)

Saturday, September 30, 2000 – Seminar Room W220:

09:00 – 09:50  H. Troger, (Lecture Hall W221)
10:00 – 10:30  Coffeebreak

10:30 – 10:55  Čiegis, Raimondas  (Vilnius Gediminas Technical University)  
On Efficient Difference Schemes for Modelling a Moisture Movement in Wood.

11:00 – 11:25  Krause, Egon  (Technical University of Aachen)  
The Sonic Singularity of the Parabolized Navier-Stokes Equations.

11:30 – 11:55  Tsybulin, Vyacheslav  (Rostov State University, Rostov on Don)  
Preservation of Cosymmetry by Finite-Difference Approximations for Filtrational Convection Problems.

12:00 – 12:50  H. Yserentant, (Lecture Hall W221)