

Program

Monday June 3, 2002

10:00 – 10:45

F. ALBERTO GRÜNBAUM (University of California, Berkeley, USA)
Diffuse or optical tomography as a general nonlinear inverse problem for a Markov chain

11:15 – 12:00

ERKKI SOMERSALO (Helsinki University of Technology, Finland)
Inverse boundary value problem for Maxwell equations with scalar impedance

12:15 – 13:00

SERGIO VESSELLA (Università degli Studi di Firenze, Italy)
Optimal three cylinder inequality for solutions to parabolic equations and stability estimates in inverse problems

Tuesday June 4, 2002

9:00 – 9:45

ALFREDO LORENZI (Università degli Studi di Milano, Italy)
Identification problems for linear integro-differential equations

10:00 – 10:45

DAVID ISAACSON (Rensselaer Polytechnic Institute, New York, USA)
Electrical Impedance Imaging for Medical Applications

11:15 – 12:00

MAARTEN V. DE HOOP (Colorado School of Mines, Golden CO, USA)
Seismic inverse scattering in the ‘wave-equation’ approach

12:15 – 13:00

MATTI LASSAS (University of Helsinki, Finland)
Inverse boundary value problems on non-compact manifolds

Short Communications

15:35 – 15:55

ALEXANDRU TAMASAN (University of Washington, USA)
2D Optical Tomography in Critical Regime

16:30 – 16:50

GABRIELE INGLESE (Istituto di Analisi Globale ed Applicazioni, CNR, Florence, Italy)
An algorithm for corrosion detection via simultaneous reconstruction of material loss and energy dispersion coefficients

16:55 – 17:15

BRUNO CANUTO (Université Blaise Pascal, France)
Determining Two Coefficients in Elliptic Operators via Boundary Spectral Data: a Uniqueness Result

Wednesday June 5, 2002

9:00 – 9:45

MICHAEL VOGELIUS (Rutgers, The State University of New Jersey, USA)
Blow-up of solutions to non-linear elliptic Neumann problems

10:00 – 10:45

PLAMEN STEFANOV (Purdue University, USA)
Inverse Problem for the 2D transport equation

11:15 – 12:00

MAURO GIUDICI (Università degli Studi di Milano, Italy)
Some problems for the application of inverse techniques to environmental modelling

12:15 – 13:00

LILIANA BORCEA (Rice University, USA)
Optimal finite difference grids for direct and inverse Sturm Liouville problems

Thursday June 6, 2002

9:00 – 9:45

VICTOR ISAKOV (Wichita State University, USA)

On uniqueness in the lateral Cauchy problem and on inverse problems for the dynamical Lamé system

10:00 – 10:45

FADIL SANTOSA (University of Minnesota, USA)

Inverse Problems Seeking Solutions

11:15 – 12:00

ALLAN GREENLEAF (University of Rochester, USA)

Global uniqueness for conormal conductivities and potentials

12:15 – 13:00

ELENA BERETTA (Università degli Studi di Roma "La Sapienza", Italy)

Asymptotic expansions of the steady-state voltage potential in the presence of thin inhomogeneities

Short Communications

15:35 – 15:55

PETER MATHÉ (Weierstrass Institute Berlin, Germany)

Optimal Discretization of Inverse Problems in Hilbert Scales

16:30 – 16:50

ALBERTO FAVARON (Università degli Studi di Milano, Italy)

Parabolic integrodifferential identification problems related to memory kernels with special symmetries

16:55 – 17:15

ELISA FRANCINI (Istituto di Analisi Globale ed Applicazioni, CNR, Florence, Italy)

Asymptotic formulas for perturbations in the electromagnetic fields due to the presence of thin inhomogeneities

Friday June 7, 2002

9:00 – 9:45

LASSI PÄIVÄRINTA (University of Oulu, Finland)
Inverse scattering from a random potential in 2D

10:00 – 10:45

YAROSLAV V. KURYLEV (Loughborough University, UK)
Stability in Inverse Boundary Spectral Problems

11:15 – 12:00

CLIFFORD NOLAN (Rensselaer Polytechnic Institute, New York, USA)
Microlocal Methods for Anisotropic Materials

12:15 – 13:00

ANTONINO MORASSI (Università degli Studi di Udine, Italy)
Detecting inclusions with extreme conductivities

Saturday June 8, 2002

9:00 – 9:45

MARIO BERTERO (Università di Genova, Italy)
Restoration of astronomical images at thermal infrared wavelenghts

10:00 – 10:45

WILLIAM RUNDELL (Texas A&M University, USA)
Some new inverse eigenvalue problems

11:15 – 12:00

GUNTHER UHLMANN (University of Washington, USA)
Travel time tomography