Wednesday, 26 August

Plenary Lectures

9:00 – 10:00 **Auditorium Maximum H 105**

Christopher Deninger, Universität Münster, Münster, Germany
Some Analogies Between Number Theory and Dynamical Systems on Foliated Spaces *(I: p.5)*
Chair: Gerd Faltings, Max-Planck-Institut für Mathematik, Bonn, Germany

10:15 – 11:15 **Auditorium Maximum H 105**

Giovanni Gallavotti, Universitá La Sapienza, Roma, Italy
The Chaotic Hypothesis and Universal Large Deviations Properties *(I: p.6)*
Chair: Rudolf Seiler, Technische Universität, Berlin, Germany

11:45 – 12:45 **Auditorium Maximum H 105**

Jean-Michel Bismut, Université Paris-Sud, Orsay, France
Local Index Theory and Higher Analytic Torsion *(I: p.5)*
Chair: Jean-Pierre Bourguignon, Inst. des Hautes Etudes Scientifques, Bures-sur-Yvette, France

Invited Lectures

14:00 – 14:45

01 **Stevo B. Todorcevic,** CNRS, Université de Paris 7, Paris, France, Mathematicki Institut, Beograd, Yugoslavia, and University of Toronto, Toronto, Canada **MA 005**
Basis Problems in Combinatorial Set Theory *(I: p.35)*
Chair: Martin Goldstern

05 **Dmitri Burago,** Pennsylvania State University, University Park, USA **MA 001**
Hard Balls Gas and Alexandrov Spaces of Curvature Bounded Above *(I: p.68)*
Chair: Frank Duzaar

11 **Antonio Giorgilli,** Università degli Studi di Milano, Milano, Italy **H 1028**
On the problem of stability for near to integrable Hamiltonian systems *(I: p.132)*
Chair: Johannes Kellendonk

13 **Alain Lascoux,** CNRS, Université de Marne La Vallée, Noisy-le-Grand, France **H 2032**
Ordering the symmetric group: Why use Iwahori-Hecke algebras? *(I: p.157)*
Chair: Andrei Zelevinsky

15 **Lloyd N. Trefethen,** Oxford University, Oxford, UK **H 1012**
Schwarz–Christoffel Mapping in the Computer Era *(I: p.181)*
Chair: Peter J. Deuflhard

18 **Michèle Artigue (speaker),** Université de Paris 7, Paris, France **H 104**
De la compréhension des processus d'appretissage
à la conception de processus d'enseighement *(I: p.202)*
Hans-Georg Steiner (respondent), Universität Bielefeld, Bielefeld, Germany
"From the Understanding of Learning Processes
to the Design of Teaching Processes" *(I: p.203)*
Chair: Hans-Christian Reichel

15:00 – 15:45

03 **Takeshi Tsuji,** RIMS, Kyoto University, Kyoto, Japan **MA 005**
p-adic Hodge Theory in the semi-stable reduction case *(I: p.55)*
Chair: Helmut Koch

05 **Gerhard Huisken,** Universität Tübingen, Tübingen, Germany **MA 001**
Evolving hypersurfaces by their curvature *(I: p.72)*
Chair: Frank Duzaar

12 **David Oliver Siegmund,** Stanford University, Stanford, USA **H 1028**
Genetic linkage analysis: an irregular statistical problem *(I: p.148)*
Chair: Uwe Küchler

13 **Andrei V. Zelevinsky,** Northeastern University, Boston, USA **H 2032**
Multisegment duality, canonical bases and total positivity *(I: p.163)*
Chair: Mikhail M. Kapranov

15 **Bjorn Erik Engquist,** UCLA, Los Angeles, USA **H 1012**
Wavelet Based Numerical Homogenization *(I: p.179)*
Chair: Ralf Kornhuber

16:15 – 17:00

01 **Gregory Hjorth,** UCLA, Los Angeles, USA **H 1012**
When is an equivalence relation classifiable? *(I: p.32)*
Chair: Ronald B. Jensen

03 **Shou-Wu Zhang,** Columbia University, New York City, USA **MA 005**
Small points, Heegner points, and Arakelov theory *(I: p.57)*
Chair: Jürg Kramer

08 **Pertti Mattila,** University of Jyväskylä, Jyväskylä, Finland **MA 001**
Rectifiability, analytic capacity, and singular integrals *(I: p.100)*
Chair: Srishti (S.D.) Chatterji

12 **Boris Tsirelson,** Tel Aviv University, Tel Aviv, Israel **H 1028**
Within and beyond the reach of Brownian innovation *(I: p.149)*
Chair: Yuri Kifer

16 **Frank Hoppensteadt,** Arizona State University, Tempe, USA **H 2032**
Canonical Models in Mathematical Neuroscience *(I: p.187)*
Chair: Karl Sigmund

16:15 – 18:00

18 **Miguel de Guzman,** Universidad Complutense de Madrid, Madrid, Spain **H 104**
Bernard R. Hodgson, Université Laval, Québec, Canada
Aline Robert, IUFM de Versailles, France
Vinicio Villani (moderator), Università di Pisa, Pisa, Italy
Round table on: *Difficulties in the Passage from Secondary to Tertiary Education* *(I: p.204)*
Chair:

17:15 – 18:00

01 **Alex James Wilkie,** University of Oxford, Oxford, England **H 1012**
O-minimality *(I: p.35)*
Chair: Anand Pillay

03 **Hans Peter Schlickewei,** Universität Marburg, Marburg, Germany **MA 005**
The Absolute Subspace Theorem and Applications *(I: p.54)*
Chair: Alfred J. van der Poorten

08 **Stefan Müller,** Max-Planck-Inst. für Math. in den Naturwissenschaften, Leipzig, Germany **MA 001**
Unexpected solutions of first and second order partial differential equations *(I: p.104)*
Chair: John M. Ball

12 **Iain Murray Johnstone,** Stanford University, Stanford, USA **H 1028**
Oracle Inequalities and Nonparametric Function Estimation *(I: p.146)*
Chair: Persi W. Diaconis

16 Charles S. Peskin, Courant Institute, New York University, New York, USA **H 2032**
How to Catch and Transport a Chromosome *(I: p.188)*
Chair: Willi Jäger

Short Communications and Poster Sessions

Short Communications: Wednesday, 26 August, 14:00–14:45

	14:00–14:15	14:15–14:30	14:30–14:45
Sect.: **03** MA 311	Function Fields and Curves II, *Chair: Dmitry Logachev*		
	Sudhir R. Ghorpade *Number of Points of Singular Varieties over Finite Fields (p.37)*	**Seman Wong** *On the density of elliptic curves (p.47)*	**Dmitry Logachev** *Mazur–Bloch method for Siegel threefolds (p.41)*
Sect.: **04** MA 042	Surfaces/Higher-Dimensional Varieties IV, *Chair: Viktor S. Kulikov*		
	Yuri G. Prokhorov *Mori contractions of relative dimension 1 (p.59)*	**Maria Cristina Ronconi** *Algebraic threefolds with $\mathbf{q_1 = q_2 = p_g = 0, P_{2i} = 1}$, and $\mathbf{P_{2i+1} = 0}$ (p.60)*	**Ezio Stagnaro** *Pluricanonical maps of two general type threefolds with $\mathbf{p_g = 0}$ (p.60)*
Sect.: **06** H 112	Algebraic Topology of Manifolds, *Chair: Lawrence W. Conlon*		
	Ulrich Koschorke *μ-invariants of link maps in arbitrary manifolds (p.90)*	**Yuri V. Muranov** *Surgery and splitting obstruction groups for one-sided submanifolds (p.94)*	**Gerard A. Venema** *Representing homology classes of 4-manifolds (p.99)*
Sect.: **08** MA 041	Special Functions, *Chair: Promarz M. Tamrazov*		
	Raoul R.F.G. Gloden *Propriétés des polynômes orthogonaux. Développements de cas particuliers (p.126)*	**Kathy A. Driver** *Zeros of Hypergeometric Functions (p.121)*	**Momčilo Bjelica** *Asymptotic of means (p.117)*
Sect.: **08** MA 309	Metrizable Spaces, Riesz Spaces, and Integral Representations, *Chair: Paul Ressel*		
	Shozo Koshi *Partially ordered linear space (p.136)*	**Luis M. Sánchez Ruiz** *On Metrizable Barreled Spaces, Cardinals and Dimensionality (p.153)*	**Paul Ressel** *Semigroup representations, positive definite functions, and abelian C*-algebras (p.152)*
Sect.: **08** MA 043	Operator Algebras and Systems, *Chair: Palle E.T. Jorgensen*		
	B.V. Rajarama Bhat *Minimal dilation of quantum dynamical semigroups to semigroups of endomorphisms (p.116)*	**Wend Werner** *Operator Systems without Unit (p.163)*	**Palle E.T. Jorgensen** *Ruelle operators: Functions which are harmonic with respect to a transfer operator (p.133)*
Sect.: **10** H 111	PDE and Dynamical Systems, *Chair: Alexandre Kometch*		
	Andrey Yu. Goritsky *Integral manifolds with exponential tracking (p.204)*	**Jörg Härterich** *Heteroclinic Orbits Between Rotating Waves in Hyperbolic Balance Laws (p.205)*	**Alexandre Kometch** *Attractors for Hamiltonian Nonlinear Wave Equations (p.210)*
Sect.: **10** H 110	Non-linear Theory, *Chair: Masafumi Yoshino*		
	Vladimir Kozlov *Singularities of solutions of nonlinear elliptic equations (p.211)*	**Sidi Mohammed Bouguima** *Free boundary problem in the plane (p.199)*	**Masafumi Yoshino** *Global solvability of fully nonlinear equations and Toeplitz operators (p.225)*
Sect.: **12** H 107	Gaussian Processes, *Chair: Manfred Breger*		
	Krzysztof Dębicki *Asymptotic of the tail distribution of supremum from a Gaussian process (p.250)*	**Tudor Sireteanu** *An extension of Gaussian equivalent linearization (p.270)*	**Victoria Parkhomenko** *Spectral representation of the scaling limit solutions of the Burgers' equation with random data (p.265)*
Sect.: **12** H 1029	Nonparametric Curve Estimation, *Chair: Joerg Polzehl*		
	Renfang Jiang *The mean sum of squared error of a wavelet based multinomial density estimator (p.255)*	**Eva Herrmann** *Visualization of empirical test results for pseudorandom number generators (p.253)*	**Hua Liang** *Partially linear errors-in-variables model (p.258)*
Sect.: **16** H 106	Optimization, *Chair: Uwe T. Zimmermann*		
	Ludwig Cromme *Optimization of a Production Line in Brown Coal Industry (p.321)*	**Ludwig Kohaupt** *Optimization for an Exhaust Emission Problem by the Simplex Method — A Report on Work from the Automotive Industry - (p.326)*	**Uwe T. Zimmermann** *Hard Integer Programming Problems from Railroad Planning (p.334)*
Sect.: **17** H 2033	Stochastic Programming II, *Chair: Vladimir Norkin*		
	René Henrion *Quantitative stability of convex stochastic programs with probabilistic constraints (p.342)*	**Werner Römisch** *Perturbation Analysis of Stochastic Programming Problems (p.349)*	**Roger Fandom Noubiap** *A Minimax Algorithm for Calculating Statistical Tests under Generalized Moment Conditions (p.340)*
Sect.: **17** H 2013	Miscellaneous I, *Chair: Mohamed Ali Hammami*		
	Tomáš Roubíček *Relaxation in optimization theory and variational calculus*	**Mohamed Ali Hammami** *Stabilization of a certain class of nonlinear systems via an observer*	

Short Communications: Wednesday, 26 August, 15:00–15:45

	15:00–15:15	15:15–15:30	15:30–15:45
Sect.: **02** MA 311	Algebras III, *Chair: Shavkat A. Ayupov*		
	Bernhard Drabant *Cross Product Bialgebras (p.17)*	**Alexander A. Mikhalev** *Free Leibniz algebras (p.23)*	**Daouda Sangare** *Hilbert quasi-polynomial functions and generalized analytic spread (p.27)*
Sect.: **02** MA 042	Categories, *Chair: Reinhard Börger*		
	Hvedri Inassaridze *Karoubi's Conjecture for polynomial extensions of stable C*-algebras (p.19)*	**Fred E.J. Linton** *Banach Spaces Monadic over Free Pointed Cones (p.22)*	**Siaka Kante Bamba** *On quadratic modules (p.13)*
Sect.: **06** H 112	Lusternik-Shnirelmann Category, *Chair: Hans Scheerer*		
	Jean-Michel Lemaire *Rational Lusternik-Schnirelmann category of Poincaré complexes (p.91)*	**Yuli B. Rudyak** *Lusternik–Schnirelmann category of symplectic manifolds and the Arnold conjecture (p.96)*	
Sect.: **08** MA 041	Kleinian Groups, *Chair: Alexander Jur'evich Vasil'ev*		
	Ruben A. Hidalgo *$\mathcal{A}_4$, $\mathcal{A}_5$, and $\mathcal{S}_4$ of Schottky Type (p.130)*	**Weiqi Yang** *Discrete groups and dense groups (p.164)*	**Javier Pérez** *Harmonic differentials on Klein Surfaces (p.147)*
Sect.: **08** MA 309	Analytic Functions and Toeplitz Operators, *Chair: Marek Ptak*		
	Ali Abkar *A comparison theorem concerning hyperinvariant subspaces on finitely connected domains (p.113)*	**Slavko Simic** *Entire Functions of Finite Order and Regularly Varying Sequences (p.156)*	**Marek Ptak** *Toeplitz operators; dichotomy of reflexivity and transitivity (p.149)*
Sect.: **08** MA 043	Operator Algebras and Algebras of Operators, *Chair: Vladimir Manuilov*		
	Raphael S. Ponge *Wodzicki Residue for Heisenberg Manifolds (p.148)*	**Georgios F. Nassopoulos** *Coproducts and projective presentations of operator algebras (p.144)*	**Vladimir Manuilov** *Almost representations of discrete groups and K-theory (p.140)*
Sect.: **09** H 1029	Nonlinear Evolution Equations, *Chair: Michael V. Pomazanov*		
	Valery A. Gaiko *Global bifurcation theory and multiple limit cycles*	**Samuel S. Okoya** *A criterion for solutions of a model quasilinear parabolic equation*	**Michael V. Pomazanov** *About the structure of some typical singularities in implicit ordinary differential equations*
Sect.: **10** H 111	Hyperbolic Equations IV (General Theory), *Chair: Pavel A. Krutitskii*		
	Ludmila S. Pulkina *A nonlocal problem for the hyperbolic equation (p.217)*	**Peetta Kandy Ratnakumar** *Wave Equation for the Hermite Operator (p.218)*	**Pavel A. Krutitskii** *Initial-boundary value problems in multiply connected domains for an equation of composite type (p.212)*
Sect.: **10** H 110	Applied Problems II (Elasticity & Fusion), *Chair: Juan Francisco Padial*		
	Alexander A. Kosmodemyanskii *On the location of fail points in Torsion Problem (p.211)*	**Juan Francisco Padial** *Some mathematical models related to nuclear fusion (p.216)*	
Sect.: **11** H 107	Algebraic Methods in Physics, *Chair: Victor V. Zharinov*		
	Andrej V. Bulinskij *On dynamical semigroups compatible with states of von Neumann algebras (p.229)*	**Fernando F. Lledó** *On some algebraic properties of massless free nets (p.239)*	**Victor V. Zharinov** *On derivations of the Heisenberg algebra (p.246)*
Sect.: **16** H 106	Numerical Applications of Matrix Theory, *Chair: Dmitrii O. Logofet*		
	Igor N. Lyashenko О неотрицательных решениях межотраслевой модели Леонтьева-Форда *(p.329)*	**Dmitrii O. Logofet** *When matrix "flowers" help proving theorems on stability (p.328)*	**Gennady Victorovich Alferov** *Motion Planning for Multi — Agent Systems in the Time — Varying Environments*
Sect.: **17** H 2033	Semi-infinite and Semi-definite Optimization, *Chair: René Henrion*		
	Jan-J. Ruckmann *On Generalized Semi-infinite Optimization Problems (p.349)*	**Oliver Stein** *On level sets of marginal functions (p.351)*	**Ivo Nowak** *Bézier-Semidefinite Relaxations of nonconvex quadratic programs over a simplex (p.346)*
Sect.: **17** H 2013	Miscellaneous II, *Chair: Roland Wessäly*		
	Ingo Bremer *Experiences with the Optimization of Batch Distillation Processes*	**Rafail Gabasov** *Synthesis of optimal dynamical systems*	**Roland Wessäly** *New inequalities for a capacitated survivable network design problem (p.355)*

Short Communications: Wednesday, 26 August, 16:15–17:00

	16:15–16:30	16:30–16:45	16:45–17:00
Sect.: **02** MA 311	Linear Algebra and Quadratic Forms, *Chair: Stefan Heiss*		
	Herbert Möller *New central algorithms in linear algebra* (p.23)	**Dilip N. Sheth** *Completion of a unimodular vector to an invertible matrix* (p.28)	**Ulf Rehmann** *Higher anisotropic kernels of quadratic forms* (p.26)
Sect.: **04** MA 042	Algebraic Cycles, *Chair: Yuri G. Prokhorov*		
	Manfred F.G. Streit *Field of Definition and Galois Orbits of some Non–Congruence Subgroups* (p.61)	**Serguei G. Tankeev** *Algebraic cycles of small codimension on simple $2p$- or $4p$-dimensional abelian variety* (p.62)	**Johannes Huisman** *Uniformization of real algebraic curves and complex analytic coordinates on Teichmüller spaces* (p.54)
Sect.: **05** MA 041	Analysis on Manifolds, *Chair: Marian Gidea*		
	Yuri G. Borisovich *Methods of global analysis in problems of solvability of nonlinear equations and inclusions* (p.65)	**Sylvie Paycha** *Regularization as a Geometric and Stochastic Tool in Infinite Dimensions* (p.78)	**Marian Gidea** *Non-Smooth Dynamical Systems that Exhibit Hyperbolic Behavior* (p.69)
Sect.: **05** MA 043	Polyhedra/Webs, *Chair: Hakki Ismail Erdogan*		
		Anatoly D. Milka *Linear isometric deformations of polyhedra* (p.77)	**Hakki Ismail Erdogan** *On a class of hexagonal-surface-web of spheres* (p.68)
Sect.: **09** H 111	Complex Dynamical Systems, *Chair: John C. Mayer*		
	Toshiyuki Sugawa *An explicit bound for uniform perfectness of Julia sets* (p.193)	**Hiroki Sumi** *Dynamics of rational semigroups and Hausdorff dimension of the Julia sets* (p.193)	**John C. Mayer** *Invariant subcontinua in Siegel and Cremer Julia sets of polynomials* (p.183)
Sect.: **09** H 110	Impulsive Systems, *Chair: Anatoli Myshkis*		
	Dariusz Idczak *Stability in semilinear problems* (p.177)	**Cristian Dascalu** *Antiplane Shear Instability in Elastodynamics with Slip Dependent Friction* (p.174)	**Anatoli Myshkis** *Autonomous impulsive-differential equations* (p.184)
Sect.: **11** H 107	Field Theory III, *Chair: Henrik Petersson*		
	Robert Fittler *Nonstandard Quantumelectrodynamics* (p.233)	**Takashi Kimura** *Cohomological Field Theories and Tautological Classes* (p.236)	**Henrik Petersson** *Properties of analytical maps on infinite dimensional locally convex spaces* (p.242)
Sect.: **13** H 106	Combinatorial Constructions, *Chair: Mark Kayll*		
	Abdelkader Khelladi *Some Results on the Fiber Product of Graphs* (p.278)	**Andrew J. Woldar** *General properties of algebraically defined graphs* (p.287)	**Mark Kayll** *Stochastic independence properties of hard-core distributions* (p.278)
Sect.: **15** H 2033	Wavelets IV (organized by Andreas Rathsfeld), *Chair: Andreas Rathsfeld*		
	Jürgen Prestin *Polynomial wavelets*	**Andreas Rathsfeld** *Piecewise linear wavelet collocation for boundary element methods* (p.310)	
Sect.: **19** H 2013	Miscellaneous, *Chair: Seemanapalli V. Sastry*		
	Seemanapalli V. Sastry *History of Mathematics: Yesterday, Today, and Tomorrow* (p.368)		

Short Communications: Wednesday, 26 August, 17:15–18:00

	17:15–17:30	17:30–17:45	17:45–18:00
Sect.: **02** MA 311	GROUPS IV, *Chair: Bettina Wilkens*		
	Alexei N. Krasilnikov *Identities in metanilpotent groups (p.21)*	**Ernest B. Vinberg** *On a generalization of Coxeter groups*	**Munibur Rahman Chowdhury** *A commutativity theorem for groups (p.15)*
Sect.: **05** MA 041	DIFFERENTIAL EQUATIONS ON MANIFOLDS, *Chair: Congming Li*		
	Atsushi Tachikawa *A Nonexistence Result of Harmonic Maps between Hadamard Manifolds (p.82)*	**Asya Vasilyevna Aminova** *The pseudo-Riemannian manifolds with common geodesics (p.64)*	**Congming Li** *Prescribing Scalar Curvature on S^n (p.74)*
Sect.: **09** H 111	INVARIANT MANIFOLDS AND NORMAL FORMS, *Chair: Pei Yu*		
	Alexander Ya. Kopanskii *Normal forms of vector fields satisfying certain geometric conditions (p.180)*	**Alexander M. Kovalev** *The equations of invariant and oriented manifolds of dynamical systems (p.180)*	**Pei Yu** *Simplest Normal Forms of Differential Equations (p.196)*
Sect.: **09** H 110	BOUNDARY VALUE PROBLEMS, *Chair: Guiseppe Anichini*		
	Nusrat Rajabov *Linear conjugate boundary value problems for the second order linear ordinary differential equation with super–singular coefficients (p.186)*	**Masashi Kisaka** *On the Connnected Components of Julia Sets of Transcendental Entire Functions (p.180)*	**Guiseppe Anichini** *Boundary value problems for implicit ODE's in a singular case (p.170)*
Sect.: **11** H 107	THERMODYNAMICS, HYDRODYNAMICS, NON-LINEAR DYNAMICS IV, *Chair: Juan M. Alvaro Vilumbrales*		
	Sergei Fedotov *Travelling Waves in a Reaction-Diffusion System with KPP-kinetics (p.233)*	**Alexander A Alexeyev** *Superposition principles for nonlinear partial differential equations in (1+1) dimension (p.227)*	**Juan M. Alvaro Vilumbrales** *Cylindrical and spherical problems of Stefan: analytical solutions and numerical estimates (p.228)*
Sect.: **13** H 106	GEOMETRY IV, *Chair: Yuri Grigoriyevich Stoyan*		
	Alexei A. Tuzhilin *Planar Local Minimal Networks with Convex Boundaries (p.286)*	**Alexandr O. Ivanov** *Linear Networks in Euclidean Spaces R^n (p.277)*	**Yuri Grigoriyevich Stoyan** *Properties of combinatorial set images into the arithmatic Euclidean spaces (p.285)*

Poster Session: Wednesday, 26 August, 14:00–15:45

Sect.: **08** MA 144	ANALYSIS		
	Ants Aasma *Summability with speed and comparison of orders of approximation of Fourier expansions by different matrix methods of summability (p.112)*	**El Hassan E.H. El Kinani** *q-Derivation, Sine algebra, and $Ut(sl(2))$ (p.123)*	**Stefan B.A. Jakobsson** *Applications of weighted Hele-Shaw flow and kernel function techniques to Green functions for weighted biharmonic operators (p.132)*
	Volodymyr M. Kolodyazhniy *Nonlinear Identification Problem Solution Using the Wavelets of the Atomic Functions (p.136)*	**Hrvoje Kraljevic** *Landau's type inequalities for contraction cosine functions (p.137)*	**Carlos Lizama** *A Characterization of Uniform Continuity for Volterra Equations in Hilbert Spaces (p.140)*
	Igor-Ya. Novikov *Time-frequency localization of modified Daubechies wavelets (p.144)*	**Alan L. Schwartz** *Hypergroups and their maximum subgroup (p.154)*	**Katsunori Shimomura** *On the transformations which preserve polytemperatures (p.156)*
	Feng-Yu Wang *Harnack inequality for heat semigroups and log-Sobolev inequalities (p.163)*	**Oxana A. Ziza** *On absolute summability of orthogonal series (p.167)*	
Sect.: **19** MA 144	HISTORY OF MATHEMATICS		
	Carlos Gomez Bermudez *Le système des nombres chez G. Cantor (p.366)*	**Harald Gropp** *Levi, Steinitz, Zacharias, and configurations –Three German mathematicians in the 20^{th} century and a combinatorial structure (p.366)*	**Aleksandar T. Lipkovski** *Rational curves with elliptic arcs — Serret's solution of Legendre's problem (p.368)*
	Man-Keung Siu *On the myth of an ancient Chinese theorem about primality (p.369)*		

Poster Session: Wednesday, 26 August, 16:15–18:00			
Sect.: **17**	Control Theory and Optimization		
MA 144	**Shamsha A. Aipanov** *The solutions of some problems of optimal control of spacecraft (p.335)*	**Vladimir Borisov** *Bundles with chattering extremals (p.337)*	**Anna Debinska-Nagorska** *A Non-linear Hyperbolic Control Problem with Neumann Boundary Condition — Convergence of Galerkin Approximation (p.338)*
	Roland Hildebrand *Optimal synthesis of controlled systems near a focus (p.343)*	**Christian Schulz** *Optimal scheduling of a chemical batch plant (p.350)*	**Zdzislaw Stempien** *On the Optimal Control of Nonlinear Hyperbolic System — Approximation (p.351)*
	Pierre von Mouche *Sur deux problèmes géométriques dans la théorie des jeux (p.354)*	**Olga Winzer** *Complexity of vector spanning trees problems with topological criteria (p.355)*	**Stanislav T. Zavalishchin** *Dynamic impulse systems. Optimization problems in fluid mechanics (p.356)*

Other Events

17:30 **Urania**

Peter Hoffmann, IRCAM Paris, France
Mathematische Tonerzeugung: Stochastische Verfahren bei Iannis Xenakis (in German)

18:00 – 23:00 **University Campus behind the Math Building**

ICM'98 Party