American Mathematical Society
Israel Mathematical Union
Joint Meeting
May 24 – 26, 1995
Jerusalem, Israel

David Tower, Jerusalem

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Dear Colleagues,

The American Mathematical Society and the Israel Mathematical Union welcome you to our joint meeting at the Hebrew University in Jerusalem, from May 24 to May 26, 1995.

There is a long history of scientific collaboration between members of these two societies and we look forward to further collaboration. Our hope is that such joint meetings will further the spirit of cooperation in mathematical endeavours among all countries.

A Joint Program Committee consisting of members of the AMS and IMU has planned the scientific program consisting of six invited addresses and many special sessions. In addition, a local organizing committee, headed by Moshe Jarden, has labored hard to work out all the many details which such a conference entails. We hope that the result will be mathematically rewarding to all!

Yours sincerely,

Cathleen Synge Morawetz
President
American Mathematical Society

Steve Gelbart
President
Israel Mathematical Union

Joint Meeting of the American Mathematical Society and the Israel Mathematical Union Jerusalem, Israel May 24 — 26, 1995

Joint Program Committee

Joan Birman, Columbia University, New York

Miriam Cohen, Ben Gurion University, Beer Sheva

Steve Gelbart, Weizmann Institute, Rehovot

E. Christofer Lance, University of Leeds

Andy Magid, University of Oklahoma, Norman

Marie-Paule Malliavin, Pierre et Marie Curie University, Paris

Menachem Magidor, Hebrew University, Jerusalem

Lance Small, University of California, San Diego

Uri Srebro, Technion, Haifa

Local Organizing Committee

Yoav Benyamini, Technion, Haifa

Dani Berend, Ben Gurion University, Beer Sheva

Viktor Harnik, Haifa University

Moshe Jarden, Tel Aviv University (chair)

Yakar Kannai, Weizmann Institute, Rehovot

Louis Rowen, Bar Ilan University, Ramat Gan

Lior Tzafriri, Hebrew University, Jerusalem

Invited Addresses

By invitation of the Joint Program Committee, there are six invited one-hour addresses:

Susan Montgomery, University of Southern California, Los Angeles. *Hopf algebras in categories.*

Shahar Mozes, Hebrew University, Jerusalem. *Ergodic theory, Lie groups and counting lattice points.*

John W. Neuberger, University of North Texas, Denton. *Three recent results on one-parameter semigroups.*

Jacob Rubinstein, Technion, Haifa. *Mathematical models in superconductivity.*

Oded Schramm, Weizmann Institute, Rehovot. *Conformal mappings and circle packings.*

Efim Zelmanov, University of Chicago. *Lie algebra methods in group theory.*

Special Sessions

There are twenty two special sessions of selected papers. Here are the topics of these sessions and the names and affiliations of the organizers:

Algebraic Number Theory, **Ehud de Shalit,** Hebrew University, Jerusalem. **Ron Livne** (chair), Hebrew University, Jerusalem.

Applied Mathematics, **Jacob Rubinstein** (chair), Technion, Haifa.

Approximation Theory, **Lev Brutman,** Haifa University. **Dany Leviatan** (chair), Tel Aviv University. **Avraham Melkman,** Beer Sheva. **Allan Pinkus,** Technion. **Edward B. Saff,** Tampa, Florida.

Associative Algebra, **Amiram Brown,** Technion, Haifa. **Miriam Cohen,** Ben Gurion University, Beer Sheva. **Sue Montgomery,** University of Southern California, Los Angeles. **Louis Rowen** (chair), Bar Ilan University, Ramat Gan.

Automorphic Forms, **Steve Gelbart** (chair), Weizmann Institute, Rehovot. **Ron Livne,** Hebrew University, Jerusalem. **Steve Rallis,** Ohio State University, Columbus. **David Soudry,** Tel Aviv University.

Braids and Low Dimensional Topology, **Joan Birman,** Columbia University, New York. **Mina Teicher** (chair), Bar Ilan University, Ramat Gan.

Combinatorics, **Ron Aharoni,** Technion, Haifa. **Noga Alon** (chair), Tel Aviv University. **Gil Kalai,** Hebrew University, Jerusalem. **Richard Pollack,** Courant Institute, New York.

Complex Analysis, **Hershel Farkas** (chair), Hebrew University, Jerusalem. **Irwin Kra,** State University of New York, Stony Brook. **Oded Schramm,** Weizmann Institute, Rehovot. **Vladimir Lin,** Technion, Haifa.

Ergodic Theory, **Jon Aaronson** (chair), Tel Aviv University. **Hillel Furstenberg,** Hebrew University, Jerusalem. **Benjamin Weiss,** Hebrew University, Jerusalem.

Field Arithmetic, **Dan Haran** (chair), Tel Aviv University. **Moshe Jarden,** Tel Aviv University. **Helmut Völklein,** University of Florida, Gainesville.

Functional Analysis, **Yehoram Gordon,** Technion, Haifa. **William. B. Johnson,** Texas A&M University, College Station. **Joram Lindenstraus,** Hebrew University, Jerusalem. **Vitali Milman,** Tel Aviv University. **Gideon Schechtman** (chair), Weizmann Institute, Rehovot.

Game Theory and Mathematical Economics, **Robert J. Aumann,** Hebrew University, Jerusalem. **Sergiu Hart** (chair), Hebrew University, Jerusalem . **William F. Lucas,** Claremont Graduate School, California.

Geometry and Topology, **Josef Bernstein** (chair), Tel Aviv University. **Ron Donagi,** University of Pennsylvania, Philadelphia. **Leonid Poltrovich,** Tel Aviv University. **Isaac Shul,** Ben Gurion University, Beer Sheva. **Mina Teicher,** Bar Ilan University, Ramat Gan.

Group Theory, **Alex Lubotzky,** Hebrew University, Jerusalem. **Avinoam Mann,** Hebrew University, Jerusalem. **Andy Magid** (chair), University of Oklahoma, Norman. **Shahar Mozes,** Hebrew Univer-

sity, Jerusalem.

Logic, **Uri Abraham,** Ben Gurion University, Beer Sheva. **Gregory Cherlin,** Rutgers University, New Brunswick. **Victor Harnik,** Haifa University. **Arkady Leiderman,** Ben Gurion University, Beer Sheva. **Saharon Shelah** (chair), Hebrew University, Jerusalem.

Mathematical Education, **Ed Dubinsky,** Purdue University, West Lafayette. **Ted Eisenberg,** Ben Gurion University, Beer Sheva. **Rina Hershkovich,** Weizmann Institute, Rehovot. **Nitza Moshovich-Hadar,** Technion, Haifa. **Shlomo Vinner** (chair), Hebrew University, Jerusalem. **Gideon Zwas,** Tel Aviv University.

Operator Theory and Applications, **Asher Ben-Artzi,** Tel Aviv University. **Harry Dym,** Weizmann Institute, Rehovot. **Israel Gohberg** (chair), Tel Aviv University. **Henry Landau,** AT&T Bell Labs, Murray Hill. **Alexander Markus,** Ben Gurion University, Beer Sheva.

Optimization and Nonlinear Analysis, **Zvi Artstein,** Weizmann Institute, Rehovot. **Yair Censor,** Haifa University. **Alexander Ioffe,** Technion, Haifa. **Victor Mizel,** Carnegie Mellon, Pittsburgh. **Simeon Reich** (chair), Technion, Haifa. **David Shoikhet,** International College of Technology, Karmiel.

Partial Differential Equations, **Matania Ben Arzi,** Hebrew University, Jerusalem. **Jonathan Goodman,** New York University and Courant Institute. **Yakar Kannai,** Weizmann Institute, Rehovot. **Moshe Marcus,** Technion, Haifa. **Eitan Tadmor** (chair), Tel Aviv University.

Probability Theory, **Stewart Ethier,** University of Utah, Salt Lake City. **Kenneth Hochberg** (chair), Bar Ilan University, Ramat Gan.

Stochastic Dynamics, **Yuri Kifer** (chair), Hebrew University, Jerusalem. **Dan Stroock,** MIT, Cambridge. **Ofer Zeitouni,** Technion, Haifa.

Theoretical Computer Sciences, **Amos Fiat,** Tel Aviv University. **Shafi Goldwasser,** Weizmann Institute, Rehovot. **Seffi Naor** (chair), Technion, Haifa. **Noam Nissan,** Hebrew University, Jerusalem. **Avi Wigderson,** Hebrew University, Jerusalem.

Contributed Papers

There is a special session of ten-minute papers organized by **Aaron Melman,** Ben Gurion University, Beer Sheva.

Reception

The IMU and the organizers of the meeting invite registered participants of the meeting and their spouses to a reception at Meyersdorf House on Mount Scopus on Thursday, May 25 at 19:30. The mayor of Jerusalem, Mr. Ehud Olmert will greet the participants at 20:00. The costs of participating in the reception for each person is $16. Tickets will be available at the registration desks.

Special Program

On the evening of Tuesday, May 23, there will be a special program in memory of Prof. S. A. Amitsur.

Book Exhibit

All meeting participants are invited to visit the Book Exhibits in front of Canada Hall.

Lunch

Lunch is available on Campus in Givat Ram at the restaurant in the Administration Building, at the Belgia House, and at the Mensa.

Accommodation

The official tourist agency of the meeting is Trans-Global. It offers special rates for the participants at selected hotels in Jerusalem as well as a special post conference tour. Its address and telephone numbers are as follows:

Trans-Global Travel, Ltd, Holiday Inn - Crown Plaza, Givat Ram, Jerusalem, P.O. Box 32390, Jerusalem 91323; Israel, Telephone: 972-2-513222, Fax: 972-2-513212.

Registration

The registration fee is $45 except for students and unemployed mathematicians for whom it is $15. Each registered participant is entitled to participate in the plenary sessions and in all special sessions. In addition, he will get a booklet of the abstracts of his special session and of other special sessions (if available).

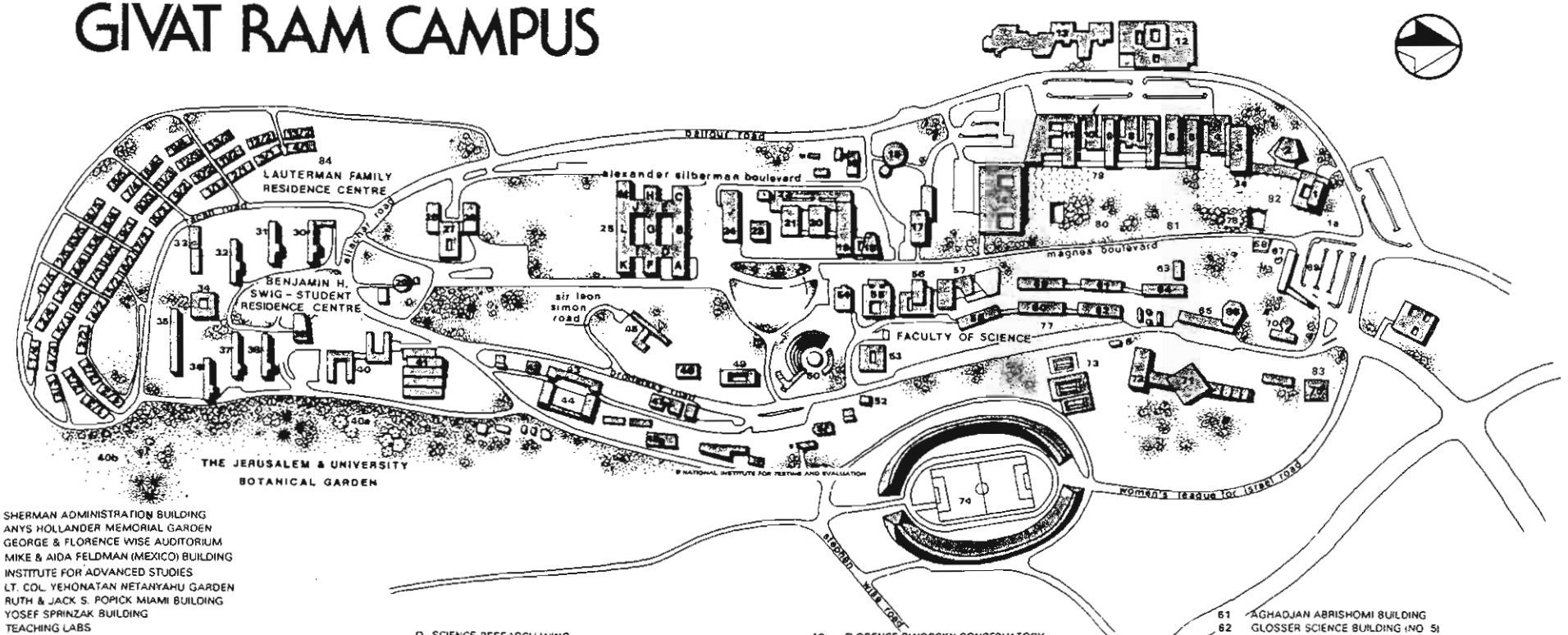
American participants can pre-register by the AMS, Providence. Israeli participants can pre-register at each of the seven departments of Mathematics in Israel. Each participant who uses the services of Trans-Global, may register through Trans-Global.

There will be also on-site registration desks. Participants may register at these desks, pick up their participant badge, a folder with the program, booklets of abstracts, and buy tickets for the reception.

Acknowledgment

The American Mathematical Society, The Israel Mathematical Union, and the organizing committee gracefully acknowledge financial support to the joint conference from the following institutions: The Hebrew University, Tel Aviv University, The Weizmann Institute, Bar Ilan University, The Israel Academy of Sciences and Humanities, and The Technion.

GIVAT RAM CAMPUS



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32 UNION OF JEWISH WOMEN OF SOUTHERN AFRICA STUDENT
HOSTEL (NO. 3)
33 OFFICES
34 BEIT SPRINZAK
35 SPRINZAK STUDENT HOSTEL (NO. 6)
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37 WOMEN'S LEAGUE FOR ISRAEL STUDENT HOSTEL (NO. 8)
38 WOMEN'S LEAGUE FOR ISRAEL HOSTEL (NO. 9)
39 WOMEN'S LEAGUE FOR ISRAEL CAFETERIA
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71 WOMEN'S LEAGUE FOR ISRAEL STUDENT CENTRE
72 H.J. COHEN SWIMMING POOL
73 TENNIS COURTS — F. SOLOMON, R. SACKVILLE, J. SHANE,
L. ROBBINS & MACCABI UNION, SOUTH AFRICA
74 NATIONAL & UNIVERSITY SPORTS STADIUM IN HONOR OF
CHARLES GROSBERG
75 BELMONTE YOUTH SCIENCE LABORATORIES CENTRE
77 SENATOR GARDEN
78 MAURICE WEINBERGER GARDEN
79 UNA HALPER GARDEN
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81 ANNA FREUD GARDEN
82 CHAIM WEIZMANN SQUARE
83 NORMAN BENTWICH GROVE
84 LAUTERMAN FAMILY RESIDENCE CENTRE

GENERAL PROGRAM

Wednesday, 24 May, 1995

8:00–9:00 Registration

9:00–9:30 Greetings

9:30–10:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

Efim Zelmanov, University of Chicago. *Lie algebra methods in group theory*

11:00–13:00 Special sessions

13:00–14:30 Lunch

14:30–15:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

Oded Schramm, Weizmann Institute, Rehovot. *Conformal mappings and circle packings*

16:00–18:00 Special sessions

Thursday, 25 May, 1995

9:00–9:30 Business session, Israel Mathematical Union

9:30–10:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

Susan Montgomery, University of Southern California, Los Angeles. *Hopf Algebras in categories*

11:00–13:00 Special sessions

13:00–14:30 Lunch

14:30–15:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

Jacob Rubinstein, Technion, Haifa. *Mathematical models in superconductivity*

16:00–18:00 Special session

19:00–23:00 Reception, Meyersdorf House, Mount Scopus

Friday, 26 May, 1995

9:30–10:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

John W. Neuberger, University of North Texas, Denton. *Three recent results on one-parameter semirgroups*

11:00–13:00 Special sessions

13:00–14:30 Lunch

14:30–15:30 Plenary session, Canada Hall and, if necessary, transmision to Feldman Hall

Shahar Mozes, Hebrew University, Jerusalem. *Ergodic theory, Lie groups and counting lattice points*

Time Table for the Special Sessions

Room\Date	Wd11-13	Wd16-18	Th11-13	Th16-18	Fr11-13
Algeb	—	Sprinz214	—	Sprinz214	Sprinz26
Appl	—	—	—	Math209	—
Approx	Popic	Popic	—	Popic	Popic
Assoc	Canada	Canada	Canada	Canada	Canada
Autom	Math110	—	Sprinz216	—	Sprinz27
Braid	Life-Rashel	Levin8	Srin214	Levin8	Math2
Comb	—	—	Feld115	Sprinz215	Math209
Compl	Popic-up	Math2	Life502	Levi07	Levi07
Contr	—	—	—	Sprinz216	—
Educ	France	FeldA	France	France	FeldA
Ergod	—	Levi04	Levi04	Levi04	Levi04
Field	Math207	Math207	Math207	Math207	Math207
Func	Feld-Eilat	Feld-Eilat	Feld-Eilat	Feld-Eilat	Feld-Eilat
Game	Math209	Math209	—	—	—
Geom	Life504	Life504	Life504	Popic-up	Popic-up
Group	Feld130	Feld130	Feld130	Feld130	Feld130
Logic	Sprinz115	Sprinz115	Sprinz115	Sprinz115	Sprinz115
Oper	—	—	Sprinz114	Sprinz114	Sprinz114
Optim	FeldB	FeldB	FeldB	FeldB	FeldB
PDE	Life502	Math110	Sprinz29	Life502	—
Prob	—	—	Math209	—	Sprinz116
Stoch	Sprinz214	Sprinz213	—	Sprinz28	Sprinz28
TCS	—	Life508	—	Life508	Sprinz25

Legend: Numbers in parenthesis indicate the position of a building on the map of the campus

Addit	—	Additive Number Theory	Game	—	Game Theory and Math. Economics
Algeb	—	Algebraic Number Theory	Geom	—	Geometry and Topology
Appl	—	Applied Mathematics	Group	—	Group Theory
Approx	—	Approximation Theory	Levi	—	Levi Building (9)
Assoc	—	Associative Algebra	Levin	—	Levin Building (57)
Autom	—	Automorphic Forms	Life	—	Institute of Life Siences (25)
Braid	—	Braids and Low Dim. Topology	Math	—	Institute of Mathematics (55)
Comb	—	Combinatorics	Oper	—	Operator Theory and Applications
Compl	—	Complex Analysis	Optim	—	Optimization and Non-Linear Analysis
Educ	—	Mathematical Education	PDE	—	Partial Differential Equations
Ergod	—	Ergodic Theory	Popic	—	Popic Building (4)
Feld	—	Feldman Building (3)	Prob	—	Probability Theory
Field	—	Field Arithmetic	Sprinz	—	Sprinzak Building (5)
France	—	Auditorium in France Building (41)	Stoch	—	Stochastic Dynamics
Funct	—	Functional Analysis	TCS	—	Theoretical Computer Sciences

PROGRAM OF THE SPECIAL SESSIONS

The time limit for each talk in the special sessions is 40 minutes. The names of all joint authors of presented papers appear in the collected list of papers of each special session below. The names that appear in this section are those authors that present the paper in person. The number that appear before the title indicates the position of the talk in the program of special sessions.

WEDNESDAY, MAY 24, 1995, 11–13

APPROXIMATION THEORY

11:00–11:30 **Yu. Brudnyi,** Technion, Haifa. 1. *Approximation spaces.*

11:40–12:10 **E. Belinsky,** Tel Aviv University. 2. *Asymptotic characteristics classes of functions with bounded mixed derivatives.*

12:20–12:50 **P. Shvartsman,** Technion, Haifa. 3. *Generalizations of Whitney's extension theorem.*

ASSOCIATIVE ALGEBRA

11:00–11:20 **David Saltman,** University of Texas, Austin. 4. *More division algebras are cyclic.*

11:25–11:45 **Eric Brussel,** University of Texas, Austin. 5. *Decomposibility and proper embeddings of division algebras.*

11:50–12:10 **Nikolaus Vonessen,** University Southern California, Los Angeles. 6. *Rational central simple algebras.*

12:15–12:35 **Gene Abrams,** University of Colorado, Colorado Springs. 7. *Embedding modules in graded modules.*

12:40–13:00 **Martin Lorenz,** Temple University, Philadelphia. 8. *Class groups of multiplicative invariants.*

AUTOMORPHIC FORMS

10:00–10:40 **Freydoon Shahidi,** Purdue University, West Lafayette. 9. *L-functions and poles of intertwining operators.*

11:00–11:40 **William Duke,** Rutgers University, New Brunswick. 10. *The dimension of the space of cusp forms of weight one.*

BRAIDS AND LOW-DIMENSIONAL TOPOLOGY

11:00–11:25 **Peter Orlik,** University of Wisconsin, Madison. 11. *Arrangements and Fundamental Groups.*

11:30–11:55 **Mario Salvetti,** University of Pisa. 12. *Cohomology of Artin groups and topological category of configuration spaces.*

12:00–12:25 **Arthur Robb,** Bar Ilan University, Ramat Gan. 13. *New simply connected spin manifolds: Galois Covers of Hirzebruch Surfaces.*

12:30–12:55 **Le Dung Trang,** CMI-Université de Provence. 14. *The topology of complex plane curves.*

COMPLEX ANALYSIS

11:00–11:20 **F. Gehring,** University of Michigan, Ann Arbor. 15. *On the Margulis constant for Kleinian groups.*

11:30–11:50 **U. Srebro,** Technion, Haifa. 16. *Beltrami equation in the alternating case.*

12:00–12:20 **I. Kra,** State University of New York at Stony Brook. 17. *Automorphic forms and theta functions.*

12:30–12:50 **H. Farkas,** Hebrew University, Jerusalem. 18. *Remarks on theta constants identities.*

FIELD ARITHMECTIC

11:00–11:30 **Zoe Chatzidakis,** Paris 7. 19. *Model theory of fields with automorphism.*

11:40–12:15 **Aharon Razon,** Tel Aviv University. 20. *Primitive recursive decidability for rings of large algebraic integers.*

12:25–13:00 **Hélène Lejeune,** Angers. 21. *Pairs of PAC fields.*

FUNCTIONAL ANALYSIS

11:00–11:25 **Ted Odell,** University of Texas, Austin. 22. *A problem in spreading models.*

11:30–11:55 **Morry Zippin,** Hebrew University, Jerusalem. 23. *Extension of operators from w^* closed subspaces of ℓ_1 into $C(K)$ spaces.*

12:00–12:25 **Maria Girardi,** University of South Carolina, Columbia. 24. *Universal non completely continuous operators.*

12:30–12:55 **Leonid Hanin,** Michigan Technological University, Houghton. 25. *Duality for generalized Lipschitz classes and applications.*

GAME THEORY AND MATHEMATICAL ECONOMICS

11:00–11:40 **William F. Lucas,** Claremont Graduate School. 26. *On the existence of cores for m-type assignment games.*

11:40–12:20 **Ehud Lehrer,** Tel-Aviv University. 27. *Merging of compatible probability measures.*

12:20–13:00 **Irinel Dragan,** University of Texas, Arlington. 28. *New properties of the Banzhaff value.*

GEOMETRY AND TOPOLOGY — Symplectic and Contact Topology

11:00–11:40 **Yakov Eliashberg,** Stanford University. 29. *Confoliations on 3-manifolds.*

11:50–12:20 **I. Ustilovsky,** Tel Aviv University. 30. *Geodesics of Hofer's metric on the group of Hamiltonian diffeomorphisms.*

12:25–13:00 **M. Bialy,** Tel Aviv University. 31. *New applications of symplectic topology.*

GROUP THEORY

11:00–11:20 **Hyman Bass,** Columbia University, New York. 32. *Tree lattices.*

11:30–11:50 **Andy Magid,** University of Oklahoma, Norman. 33. *Deformations of representations.*

12:00–12:20 **Shmuel Rossett,** Tel Aviv University. 34. *Intersections of subgroups of free groups: the Hanna Neumann Problem.*

12:30–12:59 **Gustav Lehrer,** University of Sydney. 35. *Deformation and representation theory of cellular algebras.*

LOGIC

11:00–11:30 **M. Dzamonja,** Hebrew University of Jerusalem. 36. *Some results on sucessors of singulars.*

11:40–12:10 **J. Cummings,** Hebrew University of Jerusalem. 37. *Reflection.*

12:20–13:00 **Moti Gitik,** Tel Aviv University. 38. *Some results on ω_1 saturated ideals and realvalued measurable cardinals.*

MATHEMATICAL EDUCATION

11:00–11:15 **Tommy Dreyfus,** Technological Institute, Holon. 39. *What is research in Mathematics Education? — Report from an ICMI study.*

11:20–11:35 **Ed Dubinsky,** Purdue University, West Lafayette. 40. *Epistemological investigations of concepts in undergraduate mathematics.*

11:40–11:55 **Marvin I. Freedman,** Boston University. 41. *What every mathematics student should know.*

12:00–12:15 **Daniel L. Goroff,** Harvard University, Boston. 42. *Poincare's lessons on mathematics education.*

12:20–12:35 **Brian Greer,** Queen's University, Belfast. 43. *A life-span theory of mathematical cognition?.*

12:40–12:55 **Anna Sierpinska,** Concordia University, Montreal. 44. *The synthetic and the analytic in linear algebra.*

OPTIMIZATION AND NONLINEAR ANALYSIS

11:00–11:20 **Arrigo Cellina,** SISSA, Trieste. 45. *Some existence results for non-coercive functionals.*

11:25–11:45 **Victor J. Mizel,** Carnegie Mellon University. 46. *A concentration phenomenon for N-dimensional isoperimetric variational problems.*

11:50–12:10 **Thomas I. Seidman,** University of Maryland, Baltimore. 47. *Existence of optima in the absence of convexity.*

12:15–12:35 **Itai Shafrir,** Technion, Haifa. 48. *Minimization of the Ginzburg-Landau functional with weight.*

12:40–13:00 **Alexander J. Zaslavski,** Technion, Haifa. 49. *Existence and structure of extremals of variational problems.*

PARTIAL DIFFERENTIAL EQUATIONS

11:00–11:30 **Ross Pinsky,** Technion, Haifa. 50. *The asymptotic behavior of the principal eigenvalue for small perturbations.*

11:40–12:10 **Aizik Volpert,** Technion, Haifa. 51. *Applications of topological degree to traveling waves.*

12:20–12:50 **Shlomo Engelberg,** Tel Aviv University. 52. *The stability of the viscous shock profiles for Burgers' equation with 4^{th}-order viscosity.*

STOCHASTIC DYNAMICS

11:00-11:35 **Mark Freidlin,** University of Maryland, College Park. 53. *Large scale approximation for reaction-diffusion equations.*

11:40-12:15 **Rafail Khasminskii,** Wayne State University, Detroit. 54. *Stability index of discrete systems.*

12:20-12:55 **Boris Rozovskii,** University of Southern California, Los Angeles. 55. *Wiener Chaos Expansion for Stochastic PDE's.*

WEDNESDAY, MAY 24, 1995, 16–18

ALGEBRAIC NUMBER THEORY

16:00–16:40 **Michael Larsen,** University of Pennsylvania. 56. *Interpolating* $U(2,1)$*-Eisenstein series.*

16:40–17:20 **Shai Haran,** Technion. 57. *The mystery of the prime at infinity.*

17:20–18:00 **Ron Livné,** Hebrew University, Jerusalem. 58. *Asymptotics of cubic exponential sums.*

APPROXIMATION THEORY

16:00–16:30 **J. Szadabos,** Hungarian Academy of Sciences, Budapest. 59. *Shepard operators on infinite intervals.*

16:40–17:10 **P. Vertesi,** Hungarian Academy of Sciences, Budapest. 60. *Remarks on the Shepard operators.*

17:20–17:50 **E. Passow,** Temple University, Philadelphia. 61. *Rational Approximation to* $|x|$.

ASSOCIATIVE ALGEBRA

16:00–16:20 **Ed Formanek,** Pennsylvania State University, University Park. 62. *Braid representations of low degree.*

16:25–16:45 **Amitai Regev,** Pennsylvania State University, University Park and Weizmann Institute, Rehovot. 63. *Some recent results on codimensions of PI-algebras.*

16:50–17:10 **Antonio Giambruno**, University di Palermo. 64. *On a class of central polynomials for $n \times n$ matrices.*

17:15–17:35 **Allan Berele**, DePaul University, Chicago. 65. *Embedding and nonembedding theorems for PI-algebras.*

17:40–18:00 **Michael Friger**, Ben Gurion University, Beer Sheva. 66. *Higman's theorem and almost regular automorphisms.*

BRAIDS AND LOW-DIMENSIONAL TOPOLOGY

17:00–17:25 **D. D. Long**, University of California, Santa Barbara. 67. *The topology of complex plane curves.*

16:30–16:55 **Sofia Lambropoulou**, University of Cambridge. 68. *Markov traces and skein knot invariants for the solid torus.*

17:00–17:25 **Roger Alperin**, San Jose State University. 69. *Some representations of groups of automorphisms of a free group.*

16:25–16:30 **Jun Morita**, University of Tsukuba. 70. *The functor D^{ω}, braid groups and SL_2 of rings.*

COMPLEX ANALYSIS

16:00–16:20 **H. Masur**, University of Illinois at Chicago. 71. *The Poisson boundary of the mapping class group and of Teichmüller space.*

16:30–16:50 **B. Maskit**, State University of New York at Stony Brook. 72. *On classical Schottky groups.*

17:00–17:20 **M. Tretkoff**, Stevens Institute of Technology, Princeton. 73. *The classification of surfaces revisited.*

17:30–17:50 **E. Dynkin**, Technion, Haifa. 74. *An inequality for rational functions.*

ERGODIC THEORY

16:00–16:40 **Manfred Denker**, University of Göttingen. 75. *Markov Fibred Systems.*

16:50–17:20 **James T. Campbell**, Memphis State University. 76. *Spectrum of transfer operators induced by expanding maps.*

17:30–18:00 **Radu Zaharopol**, State University of New York, Binghampton. 77. *Asymptotic stability and the Dobrushin constant of ergodicity.*

FIELD ARITHMETIC

16:00–16:30 **Dan Haran**, Tel Aviv University. 78. *Regular realization of groups revisited.*

16:40–17:15 **Tammy Lefcourt**, University of Pennsylvania, Philadelphia. 79. *Galois groups over complete rings.*

17:25–18:00 **Helmut Völklein**, University of Florida, Gainesville. 80. *GAR, GAL and GAP-realizations.*

FUNCTIONAL ANALYSIS

16:00–16:25 **Sean Dar,** Tel Aviv University, Tel Aviv. 81. *On the isotropic capacity of non-symmetric bodies.*

16:30–16:55 **Shlomo Reisner,** Haifa University. 82. *Constructing a polytope to approximate a convex body.*

17:00–17:25 **Carsten Schutt,** Oklahoma State University, Stillwater. 83. *On the expected volume of random polytopes.*

17:30–17:55 **Mark Rudelson,** Hebrew University, Jerusalem. 84. *Approximate John's decompositions.*

GAME THEORY AND MATHEMATICAL ECONOMICS

16:00–16:40 **Dov Monderer,** Technion, Haifa. 85. *Potentials and weighted values of non-atomic games.*

16:40–17:20 **Igal Milchteich,** Hebrew University, Jeruslaem. 86. *Generic uniqueness of equilibria in non-atomic congestion games.*

17:20–18:00 **Abraham Neyman,** Hebrew University, Jerusalem. 87. *Repeated games and bounded complexity.*

GEOMETRY AND TOPOLOGY — Algebraic and Arithmetic Geometry

16:00–16:30 **Eckart Viehweg,** Universität Essen. 88. *A discussion on moduli of singular schemes.*

16:35–17:05 **Vladimir G. Berkovich,** Weizmann Institute. 89. *The automorphism group of the Drinfeld half-plane.*

17:10–17:40 **Hélène Esnault,** Universität Essen. 90. *Divisibility in the Chow group and torsion in the cohomology.*

17:40–18:00 **Boris Kunyavski,** Bar Ilan University, Ramat Gan. 91. *Splitting fields of rational surfaces.*

GROUP THEORY

16:00–16:20 , . 92. .

16:30–16:50 **Renato Feres,** Washington University. 93. *Actions of higher rank semiseimple groups, differential geometry, and Zimmer's Conjecture.*

17:00–17:20 **Vladimir Platonov,** University of Waterloo. 94. *Proximal elements in linear groups over local fields.*

17:30–17:50 **Dave Witte,** Williams College, Williamstown. 95. *Products of Similar Matrices.*

LOGIC

16:00–16:30 **A. Blaszczyk,** Uniwersytet Slaski, Katowice. 96. *Regular subalgebras of complete Boolean algebras.*

16:40–17:10 **M. Rabus,** Hebrew University of Jerusalem. 97. *Forcing Boolean Algebras of cardinality* $\aleph_2$.

17:20–17:50 **Z. Spasojevic,** Hebrew University of Jerusalem. 98. (ω_1, ω_1)*-gaps in* $(\mathcal{P}(\omega), \subset^*)$ *and* $(\omega^\omega, \leq^*)$.

MATHEMATICAL EDUCATION

16:00–16:15 **Marcia C. Linn**, University of California, Berkeley. 99. *Gender and success in mathematics.*

16:20–16:35 **Leonard Gillman**, University of Texas, Austin. 100. *Some irreverent thoughts on the teaching of mathematics.*

16:40–16:55 **Martin Bonsangue**, California State University, Sonoma. 101. *The effect of emerging scholars programs on minority achievements in the mathematical sciences.*

17:00–17:15 **Joseph G. Wimbish**, Huntington College, Montgomery. 102. *Some effects of a problem solving course on the classification of attitudes and beliefs about mathematics.*

17:20–17:35 **Barbara Zinn**, Hebrew University, Jerusalem. 103. *Reverse modeling of probabilistic concepts: From the model to students' texts.*

17:40–17:55 **Tatyana Zaslavsky**, Technion, Haifa. 104. *Secondary mathematics teachers' understanding of basic probability concepts.*

OPTIMIZATION AND NONLINEAR ANALYSIS

16:00–16:20 **Hector J. Sussmann**, Rutgers University. 105. *The finite-dimensional maximum principle of optimal control theory: weak hypotheses, strong conclusions, and a coordinate-free formulation.*

16:25–16:45 **Arie Leizarowitz**, Technion, Haifa. 106. *Optimization of infinite horizon Markov decision processes.*

16:50–17:10 **Pavel E. Sobolevski**, Hebrew University, Jerusalem. 107. *Investigation of some degenerate minimum problems.*

17:15–17:35 **Yosef N. Yomdin**, Weizmann Institute, Rehovot. 108. *High order discretization for parametric optimization problems.*

17:40–18:00 **Edriss S. Titi**, University of California, Irvine. 109. *On the minimal number of determining modes for nonlinear dissipative evolution equations.*

PARTIAL DIFFERENTIAL EQUATIONS

16:00–16:30 **Tamir Tassa**, University of California, Los Angeles. 110. *On the homogenization of oscillatory solutions to nonlinear convection-diffusion equations.*

16:40–17:10 **Michael Solomyak**, Weizmann Institute, Rehovot. 111. *The eigenvalue behavior for the boundary value problems related to self-similar measures on R^d.*

17:20–17:50 **Misha Bialy**, Tel Aviv University. 112. *A system of conservation laws arising in the study of integrable Hamiltonian systems.*

STOCHASTIC DYNAMICS

16:00-16:35 **Richard S. Ellis**, University of Massachussets, Amherst. 113. *Large deviation analysis of queueing systems.*

16:40-17:15 **Liptser Robert,** Tel Aviv University. 114. *Convergence of conditional expectation (nonlinear filtering with contamination).*

17:20-17:55 **Amir Dembo,** Technion, Haifa. 115. *Uniform large deviations for empirical sample path.*

THEORETICAL COMPUTER SCIENCES

16:00–16:35 **A. Wigderson,** Hebrew University, Jerusalem. 116. *Results and open problems on arithmetic complexity.*

16:40–17:15 **E. Gafni,** University of California, Los Angeles. 117. *Is distributed-computing but a simple application of algebraic topology?.*

17:20–17:55 **C. Dwork,** IBM Almaden Research Center. 118. *Powerful primitives for asynchronous shared-memory algorithms.*

THURSDAY, MAY 25, 1995, 11–13

ASSOCIATIVE ALGEBRA

11:00–11:20 **Issai Kantor,** Bar Ilan University, Ramat Gan. 119. *The algebra of polynomial invariants for the adjoint representation of the Lie superalgebra* $\mathrm{gl}(m,n)$.

11:25–11:45 **M. P. Malliavin,** University of Paris. 120. *The spectrum of a Kirkman-Small algebra.*

11:50–12:10 **Ed Letzter,** Texas A&M University, College Station. 121. *Extensions of simple modules over classical Lie superalgebras.*

12:15–12:35 **Ellen Kirkman,** Wake Forest University Winston Salem. 122. *Global and Krull dimensions of quantum Weyl algebras.*

12:40–13:00 **Ayelet Lindenstrauss,** Technion, Haifa. 123. *Deformation retracts and the Hochschild homology of polynomial rings.*

AUTOMORPHIC FORMS

11:00–11:40 **Jonathan Rogawski,** University of California, Los Angeles. 124. *Integrals of Eisenstein series over the period subgroup.*

12:00–12:40 **Laure Barthel,** Bar Ilan University, Ramat Gan. 125. *Modular representations of* GL(2).

BRAIDS AND LOW-DIMENSIONAL TOPOLOGY

11:00–11:25 **Alexander Balinsky,** Technion, Haifa. 126. *Symplectic actions of the braid groups and link-groups representations.*

11:30–11:55 **Petrick Dehornoy,** Université de Toulouse. 127. *A new algoritmm for braid word comparison.*

12:00–12:25 **Jerome Los,** Université de Nice. 128. *Destabilization in the braid groups.*

12:30–12:55 **Bruce Westbury,** University of Nottingham. 129. *A recipe for finite dimensional quotients of the braid group algebras.*

COMBINATORICS

11:00–11:25 **Janos Pach,** Courant Institute and Math. Inst. Hungar. Acad. Sci.. 130. *Geometric Ramsey theory.*

11:30–11:55 **Meir Katchalski,** Technion, Haifa. 131. *Piercing planar convex sets.*

12:00–12:25 **Aviezri Fraenkel,** Weizmann Institute, Rehovot. 132. *Elementary particle physics games and error correcting codes.*

12:30–12:55 **Mikhail Klin,** Ben Gurion University, Beer Sheva. 133. *A directed version of strongly regular graphs and coherent (cellular) algebras.*

COMPLEX ANALYSIS

11:00–11:20 **B. Osgood,** Stanford University, Stanford. 134. *Recent results on univalence criteria, convexity, and homeomorphic extensions.*

11:30–11:50 **S. Krushkal,** Bar Ilan University, Ramat Gan. 135. *Univalent functions and holomorphic motions.*

12:00–12:20 **C. Earle,** Cornell University, Ithaca. 136. *Metric geometry in infinite dimensional Teichmüller spaces.*

12:30–12:50 **B. Abikoff,** University of Connecticut, Storrs. 137. *Adapted metrics for hyperbolic manifolds.*

ERGODIC THEORY

11:00–11:40 **Meir Smorodinsky,** Tel Aviv University. 138. *Processes which cannot be parametrized by independent random variables.*

11:50–12:20 **Ben-Zion Rubshtein,** Ben Gurion University, Beer Sheva. 139. *Classification of measurable partitions with respect to certain ergodic equivalence relations.*

12:30–13:00 **Mordechai Levin,** Tel Aviv University. 140. *On the upper bounds of discrepancy of completely uniform distributed and normal sequences.*

FIELD ARITHMECTIC

11:00–11:30 **Moshe Jarden,** Tel Aviv University. 141. *PSC Galois extensions of global fields.*

11:40–12:15 **Konrad Neumann,** University of Erlangen. 142. *All fields are stable.*

12:25–13:00 **Pirres Debes,** Universitè Lille. 143. *Algebraic covers: field of moduli versus field of definition.*

FUNCTIONAL ANALYSIS

11:00–11:25 **Thomas Schlumprecht,** Texas A&M University, College Station. 144. *On a Gaussian correlation problem.*

11:30–11:55 **Joel Zinn,** Texas A&M University, College Station. 145. *Hypercontractivity and a Gaussian correlation inequality.*

12:00–12:25 **Elisabeth Werner,** Case Western Reserve University, Clevland. 146. *On a Gaussian correlation inequality.*

12:30–12:55 **Fima Gluskin,** Tel Aviv University. 147. *On subspaces of L_p spanned by independent random variables.*

GEOMETRY AND TOPOLOGY — Geometry and Physics

11:00–11:30 **Igor V. Dolgachev,** University of Michigan, Ann Arbor. 148. *Mirror symmetry for algebraic $K3$-surfaces.*

11:30–12:00 **Ron Donagi,** University of Pennsylvania, Philadelphia. 149. *Quantum cohomologies, integrable systems and normal functions.*

12:05–12:35 **M. Shubin,** Northeastern University, Boston. 150. *Semiclassical asymptotics and Morse-type inequalities.*

12:35–13:00 **J. Weitsman,** University of California, Santa Cruz. 151. *Geometry of the intersection ring of the moduli space of flat connections and the Conjectures of Newstead and Witten.*

GROUP THEORY

11:00–11:20 **Oleg Tavgen,** Belarus Academy of Science, Minsk. 152. *Some applications of the profinite and algebraic group theories in the combinatorial group theory.*

11:30–11:50 **Andrei Rapinchuk,** Universitat Bielefeld. 153. *The normal subgroup structure of* $\mathrm{SL}(1, D)$ *and the classification of finite simple groups.*

12:00–12:20 **Marcus Du Sautoy,** Oxford University. 154. *Zeta Functions of Groups.*

12:30–13:00 **Avinoam Mann,** Hebrew University, Jerusalem. 155. *Zeta functions of residually finite groups.*

LOGIC

11:00–11:30 **S. Friedman,** MIT and Université de Paris 7. 156. *Fine structure and class forcing.*

11:40–12:10 **T. Bartoszynski,** Boise State University. 157. *Cardinal invariants and sets of reals.*

12:20–12:50 **J. Cichoń,** Uniwersytet Wrocławski. 158. *On ideals with Borel Base.*

MATHEMATICAL EDUCATION

11:00–11:15 **Michael Fried,** University of California, Irvine. 159. *Interactive questionnaires: retrograde learning.*

11:20–11:35 **Rina Hershkowitz,** Weizman Institute of Science, Rehovot. 160. *Enhancing the construction of mathematical hypotheses in a technology based classroom enviroment.*

11:40–11:55 **Hanna Perl,** Hebrew University, Jerusalem. 161. *The impact of graphic calculators on the learning of mathematics.*

12:00–12:15 **Gerald J. Porter,** University of Pennsylvania, Philadelphia. 162. *Interactive linear algebra in mathcad: a text for teaching linear algebra as a lab course.*

12:20–12:35 **Nurit Zehavi,** Weizmann Institute of Science, Rehovot. 163. *Challenging prospective teachers to create mathematical projects with derive.*

12:40–12:55 **Gideon Zwas,** Tel Aviv University. 164. *Precollege numerical mathematics.*

OPERATOR THEORY AND APPLICATIONS

11:00–11:30 **H. J. Landau,** A.T.&T. Bell Labs., Murray Hill. 165. *The inverse eigenvalue problem for real symmetric Toeplitz matrices.*

11:35–12:00 **D. Alpay,** Ben Gurion University, Beer Sheva. 166. *Tangential interpolation in matrix-valued Hardy spaces.*

12:05–12:30 **M. Gekhtman,** Weizmann Institute, Rehovot. 167. *Inverse spectral problems for difference operators and nonlinear integrable equations.*

12:35–13:00 **P. Lancaster,** University of Calgary. 168. *Perturbations of strongly definitizable operators and quasihyperbolic operator polynomials.*

OPTIMIZATION AND NONLINEAR ANALYSIS

11:00–11:20 **Shiu-Nee Chow,** Georgia Institute of Technology, Atlanta. 169. *Spatial chaos in reaction-diffusion systems.*

11:25–11:45 **Francis H. Clarke,** Univesite de Montreal. 170. *The proximal Hamilton-Jacobi equation.*

11:50–12:10 **Athanassios G. Kartsatos,** University of Southern Florida, Tampa. 171. *Functional evolutions, elliptic inclusions, and control problems involving accretive and monotone operators.*

12:15–12:35 **Abbas Bahri,** Rutgers University, New Brunswick. 172. *Variations on the same theme.*

12:40–13:00 **Zuhair M. Nashed,** University of Delaware, Newark. 173. *Newton's method for singular smooth and non-smooth equations using adaptive outer inverses.*

PARTIAL DIFFERENTIAL EQUATIONS

11:00–11:30 **Amy Cohen-Novick,** Technion, Haifa. 174. *The Cahn-Hilliard equation: degenerate diffusion and energy separation.*

11:40–12:10 **Eitan Tadmor,** Tel Aviv University. 175. *Regularizing effect in nonlinear 2nd order PDEs with kinetic formulations.*

12:20–12:50 **Edriss Titi,** University of California, Irvine. 176. *Global existence for 3-D Navier-Stokes in the presence of symmetry.*

PROBABILITY THEORY

11:00–11:35 **S. N. Ethier,** University of Utah, Salt Lake City. 177. *Coupling and ergodic theorems for Fleming-Viot processes.*

11:40–12:15 **L. G. Gorostiza**, Centro de Investigacion y de Estudios Avanzados, Mexico. 178. *Self intersection local time for fluctuation limits of branching particle systems.*

12:25–13:00 **A. Etheridge**, University of Edinburgh, Scotland. 179. *A probabilistic approach to some semilinear heat equations.*

THURSDAY, MAY 25, 1995, 16–18

ALGEBRAIC NUMBER THEORY

16:00–16:35 **Henry Darmon**, McGill University, Montreal. 180. *Rigid Analytic Gross-Zagier formulae.*

16:40–17:15 **Ehud de Shalit**, Hebrew University, Jerusalem. 181. *Metaabelian local class field theory.*

17:20–17:55 **Glenn Stevens**, Boston University. 182. *Rigid analytic modular symbols.*

APPLIED MATHEMATICS

16:00-16:20 **Philip Rosenau**, Tel Aviv University. 183. *On soliton-compacton duality.*

16:25-16:45 **Isaac Rubinstein**, Ben Gurion University, Beer Sheva. 184. *Elecrtroconvection in a layer and in a loop.*

16:50-17:10 **Alexander Nepomnyashchy**, Technion, Haifa. 185. *Nonlinear waves generated by instabilities.*

17:15-17:35 **Tamar Schlick**, Courant Institute and Chemistry Department, New York University. 186. *On Simulating the dynamics of biomolecules.*

17:40–18:00 **Jean Marc Vanden-Broeck**, University of Wisconsin, Madison. 187. *Some effects of vorticity on nonlinear free surface flows.*

APPROXIMATION THEORY

16:00–16:30 **E. B. Saff**, University of South Florida, Tampa. 188. *Asymptotically optimal rational functions for the Zolotarev problem.*

16:40–17:10 **E. R. Liflyand**, Bar Ilan University, Ramat Gan. 189. *Properties of hyperbolic linear means.*

17:20–17:50 **S. Fisher**, Northwestern University, Evanston. 190. *Widths on spaces of analytic functions on planar domains.*

ASSOCIATIVE ALGEBRA

16:00–16:20 **Susan Montgomery**, University of Southern California, Los Angeles. 191. *Hopf algebras in categories.*

16:25–16:45 **Earl Taft**, Rutgers University, New Brunswick. 192. *Quantized linearly recursive sequences.*

16:50–17:10 **Sara Westreich**, Bar Ilan University, Ramat Gan. 193. *Quasitriangular Hopf algebras with Abelian group of grouplike elements.*

17:15–17:35 **Hans-Juergen Schneider,** University of Munich. 194. *Frobenius extensions of left coideal algebras of Hopf algebras.*

17:40–18:00 **Zhu Shengli,** Fudan University. 195. *On integrality of (quantum) module algebras over their invariants.*

18:00–18:20 **Miriam Cohen,** Ben Gurion University, Beer Sheva. 196. *Quantum commutative H-module algebras.*

BRAIDS AND LOW-DIMENSIONAL TOPOLOGY

17:00–17:25 **Jonathan Simon,** University of Iowa,Iowa City. 197. *Energy functions for knots.*

16:30–16:55 **Thomas Fiedler,** Université Paul Sabatier,Toulouse . 198. *The discriminant of the space of diagrams and knot invariants.*

17:00–17:25 **Richard Randell,** University of Iowa, Iowa City. 199. *The PL Knot Space.*

17:30–17:55 **Charilaos Aneziris,** DESY-Ifh, Zeuthen . 200. *Is a Knot Classification Possible?.*

COMBINATORICS

16:00–16:25 **Jeff Kahn,** Rutgers University, New Brunswick. 201. *Asymptotics of the chromatic index for multigraphs.*

16:30–16:55 **Zvi Gregory Gutin,** Odense University. 202. *Alternating cycles and trails in 2-edge-coloured complete graphs.*

17:00–17:25 **Ron Adin,** Bar Ilan University, Ramat Gan. 203. *Cubical polytopes.*

COMPLEX ANALYSIS

16:00–16:20 **D. Aharonov,** Technion, Haifa. 204. *The hexagonal packing lemma and Rodin-Sullivan conjecture.*

16:30–16:50 **V. Tkachenko,** Ben Gurion University, Beer Sheva. 205. *Spectral properties of periodic Dirac operator with skew-symmetric potential matrix.*

17:00–17:20 **J. Arazy,** University of Haifa. 206. *Invariant spaces of analytic functions on bounded symmetric domains.*

17:30–17:50 **L. Aizenberg,** Bar Ilan University, Ramat Gan. 207. *Mean-value characterization of pluriharmonic and separately harmonic functions.*

CONTRIBUTED PAPERS

16.00–16:10 **Leonid Berezansky,** Ben Gurion University, Beer Sheva. 208. *Impulsive stabilization of linear delay differential equations.*

16:15–16:25 **Aleksey Drozdov,** Ben Gurion University, Beer-Sheva, and Technical University of Nova Scotia, Halifax. 209. (1) *A model for ultradian oscillations.*

16:30–16:40 **Seymour Haber,** Temple University, Philadelphia. 210. *Quadrature formulas through conformal mapping.*

16:45–16:55 **V. A. Kaminsky,** Bar Ilan University, Ramat Gan. 211. *On approximation of a convex function of two variables by the sum of two functions of one variable.*

17:05–17:15 **Gines Lopez,** Universidade de Granada. 212. *PCP in Banach spaces with a Schauder finite-dimensional decomposition.*

17:20–17:30 **Aaron Melman,** Ben Gurion University, Beer Sheva. 213. *Numerical methods for secular equations.*

17:35–17:45 **Eduardo Nieto,** Universidade de Granada. 214. *On M-ideals and the canonical projection.*

17:50–18:00 **Peter Turbek,** Purdue University, West Lafayette. 215. *Automorphisms of Riemann surfaces.*

ERGODIC THEORY

16:00–16:40 **Wolfgang Krieger,** Universität Heidelberg. 216. *Transformations that behave like stationary adic transformations.*

16:50–17:20 **Inger Haaland,** Agder College, Norway. 217. *Sets of recurrence and generalised polynomials.*

17:30–18:00 **Elon Lindenstrauss,** Hebrew University, Jerusalem. 218. *Lowering topological entropy.*

FIELD ARITHMECTIC

16:00–16:25 **Ido Efrat,** Hebrew University, Jerusalem. 219. *The Neukirch-Pop conjecture.*

16:30–16:55 **Jochen Koenigsmann,** University of Konstanz. 220. *A Galois-theoretic characterization of p-adically closed fields.*

17:05–17:30 **Christian Jensen,** University of Copenhagen. 221. *Procyclic and prodihedral extensions.*

17:35–18:00 **Alexander Prestel,** University of Konstanz. 222. *On the Galois group of maximal abelian field extensions.*

FUNCTIONAL ANALYSIS

16:00–16:25 **Haskell Rosenthal,** University of Texas, Austin. 223. *On the structure of differences of bounded semi-continuous functions.*

16:30–16:55 **Alvaro Arias,** University of Texas, San Antonio. 224. *Non-commutative inner and outer functions.*

17:00–17:25 **Yaakov Ben-Natan,** Hebrew University, Jerusalem. 225. *Wiener Tauberian theorem for $L^1(G//K)$ and harmonic functions in the unit disk.*

17:30–17:55 **Ya. Alber,** Technion, Haifa. 226. *Principle of weakly contractive maps in Hilbert and Banach spaces.*

GEOMETRY AND TOPOLOGY — Topology

16:00–16:40 **S. Cappell,** New York University. 227. *A topological comparison of lattice sums and integration.*

16:50–17:25 **J. Shanesson,** University of Pennsylvania, Philadelphia. 228. *Characteristic classes, singularities, and algebraic varieties.*

17:25–18:00 **S. Weinberger,** University of Pennsylvania, Philadelphia. 229. *The small scale structure of "manifolds".*

GROUP THEORY

16:00–16:20 **Sergey Schpectorov,** Michigan State University, East Lansing. 230. *Singular subgroups in M, B, and J_4.*

16:30–16:50 **Yoav Segev,** Ben Gurion University, Beer Sheva. 231. *On a simplicial complex homotopic to the Brown and Quillen p subgroups complex.*

17:00–17:20 **Aner Shalev,** Hebrew University, Jerusalem. 232. *Finite simple groups and probabilistic methods.*

17:30–17:50 **Brian Parshall,** University of Virginia, Charlottesville. 233. *Gradings in representation theory.*

LOGIC

16:00–16:30 **P. Dehornoy,** Caen Université. 234. *An Application of Set Theory to the Topology of Braids.*

16:40–17:10 **A. Szymanski,** Slippery Rock University of Pennsylvania. 235. *The metrizability number of compact spaces and related invariants.*

17:20–18:00 **Saharon Shelah,** Hebrew University of Jerusalem. 236. *Recent developments in Set Theory.*

MATHEMATICAL EDUCATION

16:00–16:15 **Hamutal David,** Technion, Haifa. 237. *Making sense out of a written proof.*

16:20–16:35 **Dan Fendel,** San Francisco State University, San Francisco. 238. *Trigonometry on the ferris wheel: A constructivist approach to the circular functions.*

16:40–16:55 **Roza Leikin,** Technion, Haifa. 239. *The role of symmetry in mathematical problem solving.*

17:00–17:15 **David Rimer,** Weizman Institute, Rehovot. 240. *Tetrahedra with the "seven mean" property.*

17:20–17:35 **Martha J. Siegel,** Touson State University, Touson. 241. *Industrial mathematics for the undergraduate.*

17:40–17:55 **Uri Wilensky,** Tufts University, Medford. 242. *Learning probability through parallel modeling.*

OPERATOR THEORY AND APPLICATIONS

16:00–16:30 **Yu. Lyubich,** Technion, Haifa. 243. *A new development of the Perron-Frobenius theory.*

16:35–17:00 **V. V. Peller,** Kansas State University, Manhattan. 244. *Approximation by matrix analytic functions.*

17:05–17:30 **E. Pustylnik,** Technion, Haifa. 245. *Generalized potential type operator on rearrangement invariant spaces.*

17:35–18:00 **V. Vinnikov,** Weizmann Institute, Rehovot. 246. *Commuting nonselfadjoint operators and algebraic curves.*

OPTIMIZATION AND NONLINEAR ANALYSIS

16:00–16:20 **Roger D. Nussbaum,** Rutgers University, New Brunswick. 247. *Periodic points of nonexpansive operators: theorems and conjectures.*

16:25–16:45 **Isao Miyadera,** Waseda University, Tokyo. 248. *Asymptotic behavior of almost-orbits of asymptotically nonexpansive semigroups in Banach spaces.*

16:50–17:10 **Stephen Simons,** University of California, Santa Barbara. 249. *Swimming below icebergs.*

17:15–17:35 **Dan Butnariu,** University of Haifa. 250. *Convergence of Bregman-projection methods in Banach spaces.*

17:40–18:00 **Ron Stern,** Concordia University, Montreal. 251. *Fixed points and equilibria in nonconvex sets.*

PARTIAL DIFFERENTIAL EQUATIONS

16:00–16:30 **Galia Dafni,** University of California, Berkeley. 252. *Hardy Spaces and Elliptic Boundary Value Problems for Smooth Domains in* $\mathbf{R}^n$.

16:40–17:10 **Mark Agranovsky,** Bar Ilan University, Ramat Gan. 253. *Uniqueness sets for spherical Radon transform.*

17:20–17:50 **Aleksey Drozdov,** Ben Gurion University, Beer Sheva. 254. *Stability of partial integro-differetial equations with applications to problems in viscoelasticity.*

STOCHASTIC DYNAMICS

16:00-16:35 **Dan Stroock,** MIT, Cambridge. 255. *Perturbations of Brownian paths on a manifold.*

16:40-17:15 **Zeev Schuss,** Tel Aviv University. 256. *An asymptotic theory of large deviations.*

17:20-17:55 **Ofer Zeitouni,** Technion, Haifa. 257. *Decay rates for one dimensional random walk in random environment.*

THEORETICAL COMPUTER SCIENCES

16:00–16:35 **M. Rabin,** Hebrew University, Jerusalem. 258. *A new paradigm for hash functions.*

16:40–17:15 **H. Karloff,** Georgia Tech, Atlanta. 259. *New results for an old algorithm for the TSP.*

17:20–17:55 **S. Even,** Technion, Haifa. 260. *Layered cross product — a technique to construct interconnection networks.*

FRIDAY, MAY 26, 1995, 11–13

ALGEBRAIC NUMBER THEORY

11:00–11:40 **J. Teitelbaum,** University of Illinois at Chicago. 261. *Numerical applications of Koike's formula.*

12:00–12:40 **Y. Varshavsky,** Hebrew University. 262. *P-adic uniformization of Shimura varieties.*

APPROXIMATION THEORY

11:00–11:30 **H. N. Mhaskar,** California State University, Los Angeles. 263. *Approximation capability of genralized translation networks.*

11:40–12:10 **G. Derfel,** Ben Gurion University, Beer Sheva. 264. *Two-scale difference equation and its generalizations.*

12:20–12:50 **D. Levin,** Tel Aviv University. 265. *Near best scattered-data approximations in* R^d.

ASSOCIATIVE ALGEBRA

11:00–11:20 **Wallace S. III Martindale,** University of Massachussets, Amherst. 266. *Lie mappings in prime rings.*

11:25–11:45 **Quanshi Wu,** Fudan University. 267. *Algebraic microlocalizations and holonomic modules.*

11:50–12:10 **Yonghua Xu,** Fudan University. 268. *Duality theorems for graded rings in double crossed products.*

12:15–12:35 **S. K. Jain,** University of Ohio, Athens. 269. *When is a simple ring Noetherian?.*

12:40–13:00 **V. Dlab,** Carleton University, Ottawa. 270. *Yoneda function algebras.*

AUTOMORPHIC FORMS

11:00–11:40 **Ze'ev Rudnick,** Tel Aviv University. 271. *Zeros of L-functions and random matrix theory.*

12:10–12:40 **Ehud Moshe Baruch,** Yale University, New Haven. 272. *On the gamma factor attached to representations of p-adic groups and strong multiplicity one.*

BRAIDS AND LOW-DIMENSIONAL TOPOLOGY

11:00–11:25 **Kyoji Saito,** RIMS, Kyoto University, Kyoto. 273. *Teichmüller space defined over* $\mathbb{Z}$.

11:30–17:55 **Toshitake Kohno,** Nagoya University. 274. *Vassiliev invariants for braids, Chern-Simons perturbation theory and the graph complex.*

12:00–12:25 **Micha Sageev,** Technion, Haifa. 275. *The k-plane intersection property for immersed incompresible surfaces in 3-manifolds.*

12:30–12:55 **Ruth Lawrence,** IHES, Bures-sur-Ivette. 276. *3-Folds Invariants at roots of unity.*

COMBINATORICS

11:00–11:25 **Richard Stanley,** MIT, Cambridge. 277. *Graph colorings and symmetric functions.*

11:30–11:55 **Michael Tarsi,** Tel Aviv University. 278. *Graph coloring, nowhere zero flows and the lonely runner problem.*

12:00–12:25 **Gabor Sarkozy,** UPenn, Philadelphia. 279. *On a new method based on the Regularity Lemma.*

12:30–12:55 **Raphael Yuster,** Tel Aviv University. 280. *Graph Packing Problems.*

COMPLEX ANALYSIS

11:00–11:20 **J. Jorgenson,** Yale University, New Haven. 281. *Spectral asymptotics of degenerating hyperbolic 3-manifolds (joint with J. Dodziuk).*

11:30–11:50 **R. Brooks,** University of Southern California, Los Angeles. 282. *The first eigenvalue of the Platonic surfaces.*

12:00–12:20 **B. Rodin,** University of California San Diego, La Jolla. 283. *Circle packing rigidity constants.*

12:30–12:50 **B. Pinchuk,** Bar Ilan University, Ramat Gan. 284. *Extremal functions and contractive divisors in A^{-n}.*

ERGODIC THEORY

11:00–11:40 **Jonathan King,** University of Florida, Gainsville. 285. *Brick tilings and monotone Boolean functions.*

12:00–12:40 **Eli Glasner,** Tel Aviv University. 286. *A simple characterisation of measure entropy pairs and applications.*

FIELD ARITHMECTIC

11:00–11:30 **Noam Elkies,** Harvard University, Cambridge. 287. *How many points can a curve have?.*

11:40–12:15 **Gerhard Frey,** Essen University. 288. *On curves of genus 2 with elliptic differentials.*

12:25–13:00 **Michael Fried,** University of California, Irvine. 289. *Modular stacks.*

FUNCTIONAL ANALYSIS

11:00–11:25 **Dale Alspach,** Oklahoma State University, Stillwater. 290. *Linear topological properties of tensor products and independent sums of $\mathcal{L}_p$-spaces.*

11:30–11:55 **Vladimir Fonf,** Ben Gurion University, Beer Sheva. 291. *Tangential polytopes and smooth approximation in separable polyhedral Banach spaces.*

12:00–12:25 **Pete Casazza,** University of Missouri, Columbia. 292. *Complemented unconditional basic sequences in Banach lattices.*

GEOMETRY AND TOPOLOGY — Geometry and Analysis

11:00–11:35 **D. Freed,** University of Texas, Austin. 293. *Eta invariants and determinant lines.*

11:35–12:00 **B. Shapiro,** Weizmann Institute, Rehovot. 294. *Stratification of Hermitian matrices, the Alexander mapping, and the bundle over eigenvalues.*

12:05–12:30 **Vladislav V. Goldberg,** New Jersey Institute for Technology, Newark. 295. *Conformal and Grassman structures.*

12:35–13:00 **Alexander Nabutovsky,** New York University. 296. *Disconnectedness of sublevel sets of some Riemannian functionals.*

GROUP THEORY

11:00–11:20 **Leonard Scott,** University of Virginia, Charlottesville. 297. *Theoretical and computational methods in representation theory.*

11:30–11:50 **Dan Rockmore,** Dartmouth College, Hanover. 298. *Separation of variables for FFT's on finite groups.*

12:30–13:00 **Grisha Soifer,** Bar Ilan University. 299. *On the Zarisky closure of the linear part of discontinuous groups of finite transformations.*

LOGIC

11:00–11:30 **J. P. Ressayre,** CNRS and Université Paris 7. 300. *Stretchings.*

11:40–12:10 **Z. Mijajlovic,** Belgrad University. 301. *Continuous quotients in nonstandard analysis.*

12:20–12:50 **K. Tent,** Hebrew University of Jerusalem. 302. *Algebraic Polygons.*

MATHEMATICAL EDUCATION

11:00–11:15 **Michael Brook,** University of Delaware, Newark. 303. *Adlerian psychology and mathematics education.*

11:20–11:35 **Orit Hazzan,** Technion, Haifa. 304. *How undergraduate students reduce abstraction level during abstract algebra course.*

11:40–11:55 **Uri Leron,** Technion, Haifa. 305. *Students' use and misuse of mathematical theorems: The case of Lagrange's theorem.*

12:00–12:15 **Gilli Shama,** Technion, Haifa. 306. *Identifying non-periodic phenomena as periodic.*

12:20–12:35 **Dina Tirosh,** Tel Aviv University. 307. *Intuitive rules: a common core to students' conceptions in science and mathematics.*

12:40–13:55 **Pessia Tsamir,** Tel Aviv University. 308. *The role of representations in comparing infinite sets.*

OPERATOR THEORY AND APPLICATIONS

11:00–11:30 **J. Pejsachowicz,** Polytechnic Institute, Turin. 309. *Spectral flow for families of selfadjoint Fredholm operators and bifurcation of critical points of strongly indefinite functionals.*

11:35–12:00 **A. Ben-Artzi,** Tel Aviv University. 310. *Inertia theorems for operator pencils and applications.*

12:05–12:30 **L. Rodman,** The College of William and Mary, Williamsburg. 311. *Inertia of operator polynomials.*

12:35–13:00 **M.V. Shapiro,** ESFM del IPN, Mexico City. 312. *Hilbert operators associated with solutions of the three–dimensional Helmholtz equation.*

OPTIMIZATION AND NONLINEAR ANALYSIS

11:00–11:20 **Adi Ben-Israel,** Rutgers University, New Brunswick. 313. *Generalized convexity in numerical analysis and optimization.*

11:25–11:45 **Åke Björck,** University of Linkoping. 314. *Stability of methods for solving augmented systems.*

11:50–12:10 **Arkadi Nemirovski,** Technion, Haifa. 315. *Polynomial-time method of analytic centers for the generalized eigenvalue problem.*

12:15–12:35 **Alexander Rubinov,** Ben Gurion University, Beer Sheva. 316. *Some applications of convex analysis to global optimization.*

PROBABILITY THEORY

11:00–11:25 **M. L. Esquível,** Universidade Nova de Lisboa. 317. *A characterization of the class of random Schwartz distributions having a mean.*

11:30–11:55 **E. Merzbach,** Bar Ilan University, Ramat Gan. 318. *Weak convergence of set-indexed point processes and the Poisson process.*

12:00–12:25 **L. G. Hanin,** Michigan Technological University, Houghton. 319. *"Hit and target" models and their identification.*

12:30–12:55 **Vladimir Vinogradov,** University of Northern British Columbia, Prince George. 320. *On various types of formation of large deviations.*

STOCHASTIC DYNAMICS

11:00-11:35 **Yuri Kifer,** Hebrew University, Jerusalem. 321. *Perron-Frobenius theorem, large deviations, and random perturbations in random environments.*

11:40–12:15 **Benjamini Itai,** Weizmann Institute, Rehovot. 322. *Harmonic functions and random walks on graphs and manifolds.*

12:20-12:55 **E. Mayer-Wolf,** Technion, Haifa. 323. *Quasiinvariant flows in infinite dimensions.*

THEORETICAL COMPUTER SCIENCES

11:00–11:35 **R. Rubinfeld,** Cornell University, Ithaca. 324. *On the robustness of functional equations.*

11:40–12:15 **A. Sinclair,** University of California, Berkeley. 325. *Monte Carlo algorithms in physics.*

12:20–12:55 **M. Luby,** University of California, Berkeley. 326. *Efficient erasure codes.*

LIST OF THE SPECIAL SESSIONS

This list contains all presented papers in the conference sorted according to their special sessions. All joint authors of a paper appear in this list. Numbers preceding the title indicate the position of the paper in the program of the special sessions. An asterisk after the name of an author in a paper with multiple authors indicates that he presents the paper in person.

Algebraic Number Theory

Henry Darmon, McGill University, Montreal. (180) *Rigid Analytic Gross-Zagier formulae.*

Ehud de Shalit, Hebrew University. (181) *Rigid analytic modular symbols.*

Shai Haran, Technion, Haifa. (57) *The mystery of the prime at infinity.*

Michael Larsen, University of Pennsylvania. (56) *Interpolating* $U(2,1)$*-Eisenstein series.*

Ron Livné, Hebrew University, Jerusalem. (58) *Asymptotics of cubic exponential sums.*

Glenn Stevens, Boston University. (182) *Rigid analytic modular symbols.*

Jeremy Teitelbaum, University of Illinois at Chicago. (261) *Numerical applications of Koike's formula.*

Yakov Varshavsky, Hebrew University at Jerusalem. (262) *P-adic uniformization of Shimura varieties.*

Applied Mathematics

Leonid Berezansky, Ben Gurion University, Beer Sheva. (208) *Impulsive stabilization of linear delay differential equations* (contributed paper).

Aleksey Drozdov, Ben Gurion University, Beer-Sheva, and Technical University of Nova Scotia, Halifax. (209) *A model for ultradian oscillations* (contributed paper).

Aaron Melman, Ben Gurion University, Beer Sheva. (213) *Numerical methods for secular equations* (contributed paper).

J. W. Neuberger, University of North Texas, Denton. (Plenary lecture) *Three recent results on one-parameter semigroups.*

Alexander Nepomnyaschy, Technion, Haifa. (185) *Nonlinear waves generated by instabilities.*

Phillip Rosenau, Tel Aviv University. (183) *On soliton-compacton duality.*

Isaac Rubinstein, Ben Gurion University, Beer Sheva. (184) *Electroconvection in a layer and in a loop.*

Jacob Rubinstein, Technion, Haifa. (Plenary lecture) *Mathematical problems in superconductivity.*

Tamar Schlick, Courant Institute and New York University. (186) *On Simulating the dynamics of biomolecules.*

Jean-Marc Vanden-Broeck, University of Wisconsin, Madison. (187) *Some effects of vorticity on nonlinear free surface flows.*

Approximation Theory

E. Belinsky, Tel Aviv University, Tel Aviv. (2) *Asymptotic characteristics classes of functions with bounded mixed derivatives.*

Yu. Brudnyi, Technion, Haifa. (1) *Approximation spaces.*

Lev Brutman, Haifa University. **E. Passow***, Temple University, Philadelphia. (61) *Rational approximation to* $|x|$.

G. Derfel, Ben Gurion University, Beer Sheva. (264) *Two-scale difference equations and its generalizations.*

S. Fisher, Northwestern University, Evanston. (190) *Widths on spaces of analytic functions on planar domains.*

V. A. Kaminsky, Bar Ilan University, Ramat Gan. (211) *On approximation of a convex function of two variables by the sum of two functions of one variable* (contributed paper).

David Levin, Tel Aviv University. (265) *Near-best scattered-data approximations in* $\mathbf{R}^d$.

Eli Levin, Open University of Israel, Tel Aviv. **E. B. Saff***, University of South Florida, Tampa. (188) *Asymptotically optimal rational functions for the Zolotarev problem.*

E. R. Liflyand, Bar Ilan University, Ramat Gan. (189) *Properties of hyperbolic linear means.*

H. N. Mhaskar, California State University, Los Angeles. (263) *Approximation capability of genralized translation networks.*

Pavel Shvartsman, Technion, Haifa. (3) *Generalizations of Whitney's extension theorem.*

J. Szadabos, Hungarian Academy of Sciences, Budapest. (59) *Shepard operators on infinite intervals.*

P. Vertesi, Hungarian Academy of Sciences, Budapest. (60) *On some new results on the shepard operator.*

Associative Algebra

Gene Abrams*, University of Colorado, Colorado Springs. **Claudia Menini**, Università di Ferrara. (7) *Embedding modules in graded modules.*

I. Ágoston, Academy of Sciences, Budapest, Hungary. **V. Dlab***, Carleton University, Ottawa. **E. Lukás**, Technical University, Budapest. (270) *Yoneda function algebras.*

Allan Berele, DePaul University, Chicago. (65) *Embedding and nonembedding theorems for PI-algebras.*

Eric Brussel, University of Texas, Austin. (5) *Decomposibility and proper embeddings of division algebras.*

Miriam Cohen, Ben Gurion University, Beer Sheva. (196) *Quantum commutative H-module algebras.*

Cohen Miriam, Ben Gurion University, Beer Sheva. **Sara Westreich**, Bar Ilan University, Remat Gan. **Zhu Shenglin***, Fudan University, Shanghai. (195) *Quantum commutative H-module algebras.*

Davida Fischman, California State University, San Bernardino. **Susan Montgomery**, University of Southern California, Los Angeles. **Hans-Juergen Schneider***, University of Munich. (194) *Frobenius extensions of left coideal algebras of Hopf algebras.*

Ed Formanek, Penn State, University Park. (62) *Braid representations of low degree.*

Michael Friger, Ben Gurion University, Beer Sheva. (66) *Higman's theorem and almost regular automorphisms.*

Antonio Giambruno* and Angela Valenti, University di Palermo. (64) *On a class of central polynomials for $n \times n$ matrices.*

Fujita Hisaaki, Tsukuba University. **Ellen Kirkman* and James J. Kuzmanovich**, Wake Forest University, Winston Salem. (122) *Global and Krull dimensions of quantum Weyl algebras.*

Dinh V. Huynh, S. K. Jain*, and **S.R. Lopez-Permouth**, University of Ohio, Athens. (269) *When is a simple ring Noetherian.*

Issai Kantor, Bar Ilan University, Ramat Gan. (119) *The algebra of polynomial invariants for the adjoint representation of the Lie superalgebra* $\mathrm{gl}(m,n)$.

Ed Letzter, Texas A&M University, College Station. (121) *Extensions of simple modules over classical Lie superalgebras.*

Ayelet Lindenstrauss, Technion, Haifa. (123) *Deformation retracts and the Hochschild homology of polynomial rings.*

Martin Lorenz, Temple University, Philadelphia. (8) *Class groups of multiplicative invariants.*

Marie-Paule Malliavin, Pierre et Marie Curie University, Paris. (120) *The spectrum of a Kirkman-Small algebra.*

Wallace S. Martindale III, University of Massachussets., Amherst. (266) *Lie mappings in prime rings.*

Susan Montgomery, University of Southern California, Los Angeles. (Plenary lecture) *Hopf algebras in categories.*

Shum Kar Ping, The University of HongKong. **Yonghua Xu***, Yonghua Fudan University. (268) *Duality theorems for graded rings in double crossed products.*

Amitai Regev, Pennsylvania State University, University Park and Weizmann Institute, Rehovot. (63) *Some recent results on codimensions of PI-algebras.*

Zinovy Reichstein, Oregon State University, Corvallis. **Nicholaus Vonessen***, University of Southern California, Los Angeles. (6) *Rational central simple algebras.*

Louis Rowen, Bar Ilan University, Ramat Gan. **David Saltman***, University of Texas, Austin. (4) *More division algebras are cyclic.*

Zhu Shenglin, Fudan University. (195) *On a class of central polynomials for $n \times n$ matrices.*

Ng Siu-Hung and Earl Taft*, Rutgers University, New Bruswick. (192) *Quantized linearly recursive sequences.*

Westreich Sara, Bar Ilan University, Ramat Gan. (193) *Quasitriangular Hopf algebras with Abelian group of grouplike elements.*

Quanshi Wu, Quanshi Fudan. (267) *Algebraic microlocalizations and holonomic modules.*

Automorphic Forms

Laure Barthel*, Bar Ilan University, Ramat Gan. **Ron Livne**, Hebrew University, Jerusalem. (125) *Modular representations of* GL(2).

Ehud Moshe Baruch, Yale University, New Haven. (272) *On the gamma factor attached to representations of p-adic groups, and strong multiplicity one.*

William Duke, Rutgers University, New Brunswick. (10) *The dimension of the space of cusp forms of weight one.*

Jon Rogawski, University of California, Los Angeles. (124) *Integrals of Eisenstein series over the period subgroup.*

Ze'ev Rudnick, Tel Aviv University. (271) *Zeros of L-functions and random matrix theory.*

Freydoon Shahidi, Purdue University, West Lafayette. (9) *L-functions and poles of intertwining operators.*

Braids and Low Dimensional Topology

Roger Alperin, San Jose State University. (69) *Some representations of groups of automorphisms of a free group.*

Charilaos Aneziris, DESY-Ifh, Zeuthen. (200) *Is a knot classification possible?.*

Alexander Balinsky, Technion, Haifa. (126) *Symplectic actions of the braid groups and link-groups representations.*

Petrick Dehornoy, Université de Toulouse. (127) *A new algorithm for braid word comparison.*

Thomas Fiedler, Université Paul Sabatier, Toulouse. (198) *The discriminant of the space of diagrams and knot invariants.*

Toshitake Kohno, Univeristy of Tokyo. (274) *Vassiliev invariants for braids, Chern-Simons perturbation theory and the graph complex.*

Sofia Lambropoulou, University of Cambridge. (68) *Markov traces and skein knot invariants for the solid torus.*

Ruth Lawrence, IHES, Bures-sur-Ivette. (276) *3-Fold invariants at roots of unity.*

D. D. Long, University of California, Santa Barbara. (67) *Finite foliations and similarity interval exchange maps.*

Jerome Los, Université de Nice. (128) *Destabilization in the braid groups.*

Jun Morita, University of Tsukuba. (70) *The functor D^{ω}, braid groups and SL_2 of rings.*

Peter Orlik and **Eric Westlund**, University of Wisconsin, Madison. (11) *Arrangements and fundamental groups.*

Richard Randell, University of Iowa, Iowa City. (199) *The PL knot space.*

Arthur Robb* and **Mina Teicher**, Bar Ilan University, Ramat Gan. (13) *Galois covers of Hirzebruch surfaces: new simply-connected spin manifold.*

Hyam Rubinstein, University of Melbourne. **Micha Sageev**, Technion, Haifa. (275) *The k-plane intersection property for immersed incompressible surfaces in 3-manifolds.*

Kyoji Saito, Kyoto University. (273) *Teichmüller space defined over* $\mathbb{Z}$.

Mario Salvetti, University of Pisa. (12) *Cohomology of Artin groups and topological category of configuration spaces.*

Jonathan Simon, University of Iowa, Iowa City. (197) *Energy functions for knots.*

Le Dung Trang, CMI-Universite de Provence. (14) *Fundamental groups and character varieties.*

Bruce Westbury, University of Nottingham. (129) *A recipe for finite dimensional quotients of the braid group algebras.*

Combinatorics

Ron Adin, Bar Ilan University, Ramat Gan. (203) *Cubical polytopes.*

Aviezri Fraenkel, Weizmann Institute, Rehovot. (132) *Elementary particle physics games and error correcting codes.*

J. Bang-Jensen and **Zvi Gregory Gutin***, Odense University. (202) *Alternating cycles and trails in 2-edge-coloured complete graphs.*

Luis Goddyn, Simon Fraser University, Burnaby. **András Sebő**, Artemis, IMAG, BP. 53x, Grenoble. **Michael Tarsi***, Tel Aviv University. **Wojtek Bienia**, Artemis, IMAG, BP. 53x, Grenoble. (278) *Graph coloring, nowhere zero flows and the lonely runner problem.*

Jeff Kahn, Rutgers University, New Brunswick. (201) *Asymptotics of the chromatic index for multigraphs.*

Meir Katchalski* and **David Nashtir**, Technion, Haifa. (131) *Piercing planar convex sets.*

Mikhail Klin*, Ben Gurion University, Beer Sheva. **Akihiro Munemasa**, Kyushu University, Fukuoka. **Mikhail Muzychuk**, Bar Ilan University, Ramat Gan. **Paul-Hermann Zieschang**, University of Kiel. (133) *A directed version of strongly regular graphs and coherent (cellular) algebras.*

Janos Pach, Courant Institute, New York and Mathematical Institute of the Hungarian Academy of Sciences, Budapest. (130) *Geometric Ramsey theory.*

Gabor Sarkozy, UPenn, Philadelphia. (279) *On a new method based on the regularity Lemma.*

Richard Stanley, MIT, Cambridge. (277) *Graph colorings and symmetric functions.*

Raphael Yuster, Tel Aviv University. (280) *Graph packing problems.*

Complex Analysis

B. Abikoff, University of Connecticut, Storrs. (137) *Adapted metrics for hyperbolic manifolds.*

D. Aharonov, Technion, Haifa. (204) *The Hexagonal Packing Lemma and Rodin-Sullivan Conjecture.*

L. Aizenberg, Bar Ilan University, Ramat Gan. (207) *Mean-value characterization of pluriharmonic and separately harmonic functions.*

J. Arazy, Haifa University. (206) *Invariant spaces of analytic functions on bounded symmetric domains.*

Ara Basmajian, University of Oklahoma, Norman. **B. Maskit***, State University of New York, Stony Brook. (72) *On classical Schottky groups.*

R. Brooks, University of Southern California, Los Angeles. (282) *The first eigenvalue of the Platonic surfaces.*

E. Dynkin, Technion, Haifa. (74) *An inequality for rational functions.*

C. Earle*, Cornell University, Ithaca. **Li Zhong**, Peking University, Beijing. (136) *Metric Geometry in infinite dimensional Teichmüller Spaces.*

H. Farkas, Hebrew University, Jerusalem. (18) *Remarks on Theta constant identities.*

F. Gehring, University of Michigan, Ann Arbor. (15) *On the Margulis constant for Kleinian groups.*

Seymour Haber, Temple University, Philadelphia. (210) *Quadrature formulas through conformal mapping* (contributed paper).

J. Jorgenson, Yale University, New Haven. (281) *Spectral asymptotics of degenerating hyperbolic 3-manifolds* (joint with J. Doziuk).

I. Kra, State University of New York, Stony Brook. (17) *Automorphic forms and theta functions.*

S. Krushkal, Bar Ilan University, Ramat Gan. (135) *Univalent functions and holomorphic motions potential matrix.*

H. Masur, University of Illinois, Chicago. (71) *The Poisson boundary of the mapping class group and of Teichmüller space.*

B. Osgood, Stanford University. (134) *Recent results on univalence criteria, convexity, and homeomorphic extensions.*

B. Pinchuk, Bar Ilan University, Ramat Gan. (284) *Extremal functions and contractive divisors in* A^{-n}.

B. Rodin, University of California, San Diegeo. (283) *Circle packing rigidity constants.*

Oded Schramm, Weizmann Institute, Rehovot. (Plenary lecture) *Circle packings and conformal maps.*

U. Srebro, Technion, Haifa. (16) *Beltrami equation in the alternating case.*

V. Tkachenko, Ben Gurion University, Beer Sheva. (205) *Spectral properties of periodic Dirac operator with skew-symmetric potential matrix.*

M. Tretkoff, Stevens Institute of Technology, Princeton. (73) *The classification of surfaces revisited.*

Peter Turbek, Purdue University, West Lafayette. (215) *Automorphisms of Riemann surfaces* (contributed paper).

Ergodic Theory

James T. Campbell, Memphis State University. (76) *Spectrum of transfer operators induced by expanding maps.*

M. Denker, Göttingen University. (75) *Markov fibered systems.*

Eli Glasner, Tel Aviv University . (286) *A simple characterization of measure entropy pairs and applications.*

Vitaly Bergelson, Ohio State University, Columbus. **Inger Haaland***, Agder College. (217) *Sets of recurrence and generalised polynomials.*

Jonathan King, University of Florida, Gainesville. (285) *Brick tilings and monotone Boolean functions.*

Wolfgang Krieger, Universität Heidelberg. (216) *Transformations that behave like stationary adic transformations.*

Mordechai. B. Levin, Tel Aviv University. (140) *On normal numbers.*

Elon Lindenstrauss, Hebrew University, Jerusalem. (218) *Lowering topological entropy.*

Ben-Zion Rubshtein, Ben Gurion University, Beer Sheva. (139) *Classification of measurable partitions with respect to ergodic equivalence relations.*

Meir Smorodinsky, Tel Aviv University. (138) *Processes which can not be parameterized by independent random variables.*

Radu Zaharopol*, State University of New York, Binghamton. **Gheorghita Zbaganu**, Rockefeller University, New York. (77) *Asymptotic stability and the Dobrushin constant of ergodicity.*

Field Arithmetic

Zoe Chatzidakis, Universite Paris 7. (19) *Model theory of algebraically closed fields with an automorphism.*

Pierre Debes, Universitè Lille. (143) *Algebraic covers: field of moduli versus field of definition.*

Ido Efrat, Hebrew University, Jerusalem. (219) *The Neukirch-Pop conjecture.*

Noam Elkies, Harvard University, Cambridge. (287) *How many points can a curve have.*

Gerhard Frey, Essen University. (288) *On curves of genus 2 with elliptic differentials.*

Michael Fried, University of California, Irvine. (289) *Real points on modular stacks.*

Wulf-Dieter Geyer, Universität Erlangen. **Christian Jensen***, University of Copenhagen. (221) *Procyclic and prodihedral extensions.*

Dan Haran, Tel Aviv University. **Helmut Völklein**, University of Florida, Gainesville. (78) *Regular realization of groups, revisited.*

Moshe Jarden* and **Aharon Razon**, Tel Aviv University. (141) *PSC Galois extensions of global fields.*

Jochen Koenigsmann, Universität Konstanz. (220) *A Galois-theoretic characterization of p-adically closed fields.*

Tammy Lefcourt, University of Pennsylvania, Philadelphia. (79) *Galois groups over complete rings.*

Hélène Lejeune, Angers. (21) *Pairs of PAC fields.*

Konrad Neumann, Universität Erlangen. (142) *All fields are stable.*

Alexander Prestel, Universität Konstanz. (222) *On the Galois group of maximal abelian field extensions.*

Aharon Razon, Tel Aviv University, (20) *Primitive recursive decidability for rings of large algebraic integers.*

Helmut Völklein, University of Florida, Gainesville. (80) *GAR, GAL and GAP-realization.*

Functional Analysis

Ya. Alber*, Technion, Haifa. **S. Guerre-Delabriere**, Université Paris VI. (226) Principle of weakly contractive maps in Hilbert and Banach spaces.

Dale Alspach, Oklahoma State University, Stillwater. (290) *Linear topological properties of tensor products and independent sums of $\mathcal{L}_p$-spaces.*

Alvaro Arias*, University of Texas, San Antonio. **Gelu Popescu**, The University of Texas, San Antonio. (224) *Non-commutative inner and outer functions.*

Yaakov Ben-Natan*, Hebrew University, Jerusalem. **Y. Benyamini**, Technion, Haifa. **H. Hedenmalm**, Uppsala University. **Y. Weit**, University of Haifa. (225) *Wiener tauberian theorem for $L^1(G//K)$ and harmonic functions in the unit disk.*

Pete Casazza* and **Nigel J. Kalton**, University of Missouri, Columbia. (292) *Complemented unconditional basic sequences in Banach lattices.*

Sean Dar, Tel Aviv University. (81) *On the isotropic capacity of non-symmetric bodies.*

R. Deville, University of Bordeaux. **Vladimir Fonf***, Ben Gurion University, Beer Sheva. **P. Hajek**, University of Alberta, Edmonton. (291) *Tangential polytopes and smooth approximation in separable polyhedral Banach spaces.*

Maria Girardi*, University of South Carolina, Columbia. **William B. Johnson**, Texas A&M University, College Station. (24) *Universal non-completely-continuous operators.*

Fima Gluskin, Tel Aviv University. (147) *On subspaces of L_p spanned by independent random variables.*

Yehoram Gordon, Technion, Haifa. **Mathieu Meyer**, Université de Marne-la-Vallée, Noisy-le-Grand. **Shlomo Reisner***, Haifa University. (82) *Constructing a polytope to approximate a convex body.*

Leonid Hanin, Michigan Technological University, Houghton. (25) *Duality for generalized Lipschitz classes and applications.*

P. Hitczenko, North Carolina State University, Raleigh. **S. Kwapien**, Institute of Mathematics, Warszawa. **W. Li**, University of Delaware, Newark. **G. Schechtman**, Weizmann Institute, Rehovot. **Th. Schlumprecht** and **Joel Zinn***, Texas A&M University, College-Station. (145) *Hypercontractivity and a Gaussian correlation inequality.*

Gines Lopez* and **Juan Francisco Mena**, Universidade de Granada. (212) *PCP in Banach spaces with a Schauder finite-dimensional decomposition* (contributed paper).

Eduardo Nieto* and **Juan Carlos Cabello**, Universidade de Granada. (214) *On M-ideals and the canonical projection* (contributed paper).

Ted Odell*, University of Texas at Austin. **Th. Schlumprecht**, Texas A&M University, College Station. (22) *A problem in spreading models.*

Haskell Rosenthal, University of Texas, Austin. (223) *On the structure of differences of bounded semi-continuous functions.*

Mark Rudelson, Hebrew University, Jerusalem. (84) *Approximate John's decompositions.*

G. Schechtman, Weizmann Institut Rehovot. **Thomas Schlumprecht** and **J. Zinn***, Texas A&M University, College-Station. (144) *On a gaussian correlation Problem.*

Carsten Schutt, Oklahoma State University, Stillwater. (83) *On the expected volume of random polytopes.*

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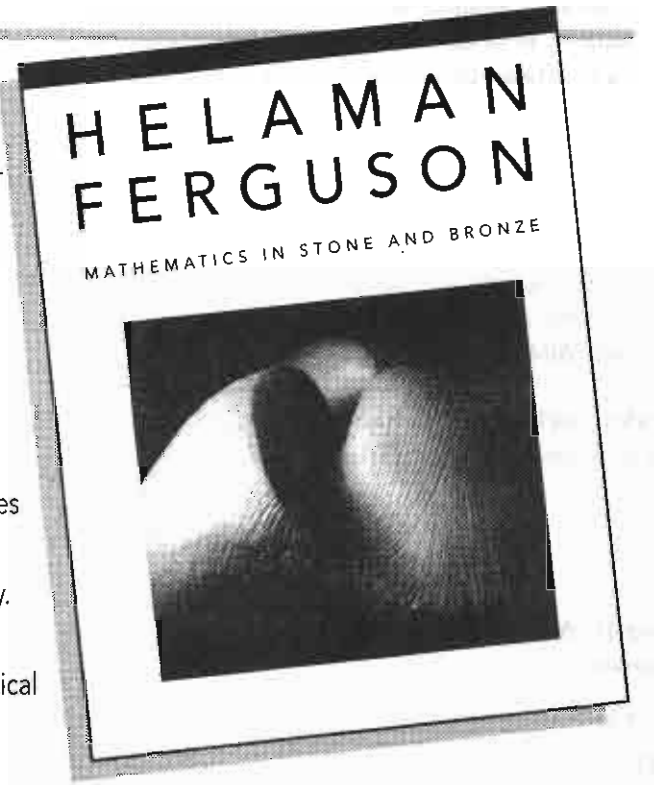

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Masakazu Nasu

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Hongbing Su

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