

March 1, 1980

## IAMP NEWS BULLETIN

### Progress Report

1. There have been two proposals for 1983 IAMP Conference, one from Blacksburg, Virginia U.S.A. and the other from Boulder, Colorado U.S.A.
2. The organization of 1981 IAMP Conference (i.e. VI International Conference on Mathematical Physics) at Berlin is in progress. It should be noted that the date has been changed to August 11 - 21, 1981 due to a collision with a giant event in Berlin.

H. Araki

### Open Position

The Harvard Physics Department will very likely appoint an Assistant or Associate Professor interested in Mathematical Physics for a term of three to five years starting in September 1980. Subsequent extension of the appointment and/or promotion to tenure are not excluded, but neither are they guaranteed. Any suggestion of candidates should be addressed to Professor A. M. Jaffe, Lyman Laboratory of Physics, Cambridge, Massachusetts 02138, USA.

### Conferences (\* indicates a new item, # a correction in an old item.)

French-American Seminar, Rutgers Univ. New Jersey, U.S.A., postponed to Spring, 1980.

Subject: Mathematical Physics and Statistical Mechanics.

Further information: J. L. Lebowitz, Dept. Math., Rutgers Univ., New Brunswick, NJ 08903, USA.

Topics in Mathematical Physics: Boulder, March 28 - 29, 1980.

Further information: Prof. K. Gustafson, Dept. of Mathematics, Univ. of Colorado, Boulder, Colorado, USA 80309.

International School of Mathematical Physics, Erice, Sicily, Italy, June 1 - 15, 1980.

Subject: Rigorous Atomic and Molecular Physics (It includes: I Spectral and Scattering Theory, II Fermi-Thomas and Hartree-Fock Models and Their Applications, III Coulomb Systems, IV Born-Oppenheimer Approximation and its Applications, V Complex Systems.)

Speakers who have accepted or tentatively accepted: J.M. Combes, V. Enss, J. Fröhlich, J. Ginibre, I. Herbst, J. Lebowitz, E. Lieb, D. Pearson, R. Seiler, B. Simon, W. Thirring.

June 1 - 15, 1980 (June 1: Arrival day, June 15: Departure day)

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- \* News Bulletin published by the International Association of Mathematical Physics and distributed to its members.
  - \* All items for inclusion in this Bulletin, except possibly for preprints and books, should be sent with a clear indication that it is "for IAMP News Bulletin" to  
Professor H. Araki, RIMS, Kyoto University, Kyoto 606, JAPAN.
  - \* Preprints and books to be announced in this Bulletin may be sent either to H. Araki at the above address or to one of the following addresses:  
Mrs. C. Voigt-Djuran, c/o Prof. L. Streit, Fakultät für Physik, Universität Bielefeld, 4800 Bielefeld 1, BRD  
Mrs. Grace Anderson, c/o Prof. A. S. Wightman, Jadwin Hall, Princeton University, P.O.Box 708, Princeton, N.J. 08544, USA.

Further information: G. Velo, Istituto de Fisica "A. Righi", 40126 Bologna, Via Irnerio, 46 Italy and A. S. Wightman, Physics Dept., Princeton Univ., Princeton, N. J. 08544, USA.

Stochastic Differential Equations in Physics, Centre de Physique des Houches, France, June 16 - 27, 1980.

Further information: K. David Elworthy, Mathematics Institute, Univ. of Warwick, Coventry CV4 7AL, England.

- \* St Andrews Colloquium 1980, Univ. of St Andrews, Fife, Scotland, July 9 - 19, 1980. Further information: see detailed announcement below.

Nonlinear Evolution Equations and Dynamical Systems, Orthodox Academy, Chania, Crete, July 9 - 23, 1980.

Further information: Prof. A. Verganelakis, Nuclear Research Center "Demokritos", Aghia Paraskevi - Attiki, Athens, Greece and Prof. F. Calogero, c/o Dept. of Applied Mathematics, Queen Mary College, Mile End Road, London E1 4NS, England.  
(see detailed announcement in December 24, 1979 issue.)

A summer institute on Operator Algebras & Application, Queen's Univ., Kingston, Canada, July 14 - Aug. 2, 1980.

Further information: Dr. William J. LeVeque, Executive Director, American Mathematical Society, P. O. Box 6248, Providence, Rhode Island 02940, USA.

Remarks: More detailed announcement will appear later. Those wishing to participate are asked to write to Dr. William J. LeVeque and to watch the Notices of the American Mathematical Society for further information.

Statphys 14 (Fourteenth IUPAP International Conference on Thermodynamics and Statistical Mechanics), Univ. of Alberta, Edmonton, Canada, Aug. 17 - 23, 1980.

Further information: Prof. D. D. Betts, Statphys 14, Dept. of Physics, Univ. of Alberta, Edmonton, Alberta, Canada T6G 2J1.

- \* A working seminar 1980 on Models of Fundamental Interactions, Dublin Institute for Advanced Studies, Dublin, Ireland, Sept. 1 - 5, 1980.

Further information: See detailed announcement below.

Symposium "Perspective in Modern Field Theories", Stockholm, Sept. 23 - 26, 1980.

Further information: Prof. H. Snallman, Dept. Theoretical Phys., Royal Institute of Technology, S-100 44 Stockholm, Sweden.

Symposium on Ergodic Theory, von Neumann Algebras and related topics, Warwick University, Feb. - July, 1981 (Research meeting, financing still pending).

Further information: Ms. Elaine Shiels, Mathematics Institute, University of Warwick, Coventry CV4 7AL, Great Britain.

Durham Symposium on Operator Algebras, Durham, England, July 27 - Aug. 6, 1981. (Planned, Details are not yet complete and application for financial support are pending.)

Further information: B. E. Johnson, J. R. Ringrose, Dept. of Pure Mathematics Univ. of Newcastle upon Tyne, Newcastle Upon Tyne NE1 7RU, England.

VI International Conference on Mathematical Physics, Freie Universität Berlin (West Berlin), Aug. 11 - 21, 1981 (or a subset of this interval). A detailed announcement will be made later. See the item 2 of the Progress Report in Oct. 16, 1979 issue of this bulletin for the organizational structure and subject matters.

\* Detailed Announcement of Conferences

ST ANDREWS COLLOQUIUM 1980 at the Univ. of St Andrews, Fife, Scotland, on July 9 - 19, 1980.

The Colloquium is under the auspices of the Edinburgh Mathematical Society, a Colloquium will be organised by and held at the University of St Andrews from 9th to 19th July, 1980.

The morning sessions will consist of the following courses (each of about seven lectures):

Professor M. F. Atiyah, F.R.S. Vector bundles in mathematics and physics.  
Professor E. B. Curtis Homotopy, Homology and cobordism.  
Professor C. St J.A. Nash-Williams Selected topics in graph theory.

The afternoon sessions will include the following two (concurrent) series of seminars:

Algebra: directed by Professor R.W. Carter;  
Analysis: directed by Dr. G. R. Allan.

Further information: Dr. C. M. Campbell, Mathematical Institute, University of St Andrews, North Haugh, ST ANDREWS, KY16 9SS, Fife, Scotland. (Tel. No. 0334 76161, Ext 8183).

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School of Theoretical Physics, Dublin Institute for Advanced Studies in association with St. Patrick's College, Maynooth, Trinity College, Dublin, University College, Dublin.

MODELS OF FUNDAMENTAL INTERACTIONS

A Working Seminar on the above subject will take place in the Dublin Institute for Advanced Studies from Monday 1st September to Friday 5th September, 1980.

Among those who have accepted invitations to lecture are:

R. H. Dalitz (Oxford); S. Glashow (Harvard); R. Jackiw (MIT);  
H. Leutwyler (Berne); Ch. Thorne (MIT).

It is intended that the workshop be informal, and accordingly the attendance will be limited to fifty participants. A limited number of short communications from the participants will be accepted. There will be a registration fee of twenty-five Irish pounds.

Further information: The Director, School of Theoretical Physics (Working Seminar 1980), Dublin Institute for Advanced Studies, 10 Burlington Road, Dublin 4, Ireland.

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We have included in the above list of conferences some information which is of tentative nature. The purpose of this list is two-fold: First to inform IAMP members about future conferences for their choice and preparation. Second to inform the organizers of conferences about other conferences for a possible avoidance of conflict. Therefore we would appreciate very much being informed about any conference which some mathematical physicists might attend, even though the information might be tentative or incomplete. If the organizer agrees, we will also include conferences at a planning state.

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Books

T.F. Jordan, *Linear Operators for Quantum Mechanics*, available directly from the author at 2249 Dunedin Avenue, Duluth, MN 55803, USA [paperback; \$8.00, including postage and tax].

Preprints

- M. Aizenman (Department of Physics, Princeton University, Princeton, N.J. 08544, USA) Translation Invariance and Instability of Phase Coexistence in the Two Dimensional Ising System (To appear, *Commun. Math. Phys.*)
- M. Aizenman (Department of Physics, Princeton University, Princeton, N.J. 08544, USA); F. Delyon and B. Souillard (Centre de Physique Théorique, Ecole Polytechnique F-91128 Palaiseau, France) Lower Bounds on the Cluster Size Distribution (To appear, *Jour. Stat. Phys.*)
- M. Aizenman and E.H. Lieb (Department of Physics, Princeton University, Princeton, N.J. 08544, USA) The Third Law of Thermodynamics and the Degeneracy of the Ground State for Lattice Systems.
- M. Aizenman and B. Simon (Department of Physics, Princeton University, Princeton, N.J. 08544, USA) A Comparison of Plane Rotor and Ising Models.
- J.-P. Antoine (Inst. de Phys. Theor. UCL, Louvain-la-Neuve, Belgium) Partial Inner Product Spaces IV Topological Considerations.
- A. Arai (Dept. of Pure and Applied Sciences, College of General Education, Univ. of Tokyo, Komaba, Meguro-ku, Tokyo 153, Japan) Some Rigorous Results of Nonrelativistic Quantum Electrodynamics.
- H. Baumgärtel, P. Obermann and M. Wollenberg (Adademie der Wissenschaften der DDR, Zentralinstitut für Mathematik und Mechanik, 108 Berlin, GDR) Abel Wave Operators. III. Stationary Theory.
- R. Beig and W. Simon (Inst. f. Theor. Physik, Universität Wien, Wien, Austria) The Stationary Gravitational Field near Spatial Infinity.
- Ph. Combe, R. Höegh-Krohn, R. Rodriguez, M. Sirugue, M. Sirugue-Collin (Centre de Physique Théorique, C.N.R.S., Luminy, Case 907, F-13288, Marseille, Cedex 2, France) Poisson Processes on Groups and Feynman Path Integrals.
- I. Daubechies (Theoretische Natuurkunde, Vrije Universiteit Brussel, Pleinlaan 2, B-1050, Brussel, Belgium) On the Distributions Corresponding to Bounded Operators in the Weyl Quantization.
- J. Dimock (Institute for Advanced Study, Princeton, N.J. 08540, USA) Algebras of Local Observables on a Manifold.
- J.P. Gazeau (Laboratoire de Chimie Physique, 11 rue Pierre et Marie Curie, F-75231 Paris Cedex 05, France) A Remarkable Duality in one Particle Quantum Mechanics between Some Confining Potentials and  $(R + L_{\epsilon}^{\infty})$  Potentials.
- J.P. Gazeau (Laboratoire de Chimie Physique, 11 rue Pierre et Marie Curie, F-75231 Paris Cedex 05, France) Sturmian Techniques for the Discrete Spectrum of the Schroedinger Equation.
- P. Ghez (Univers. de Toulon, Chateau St-Michel, F-83130 La Garde, France), R. Lima (Centre de Physique Theor. du CNRS, Luminy Case 907, F-13288 Marseille Cedex 2, France) and J.E.Roberts (Fachbereich 5, Universität Osnabrück, D-4500 Osnabrück, West Germany)  $W^*$ -Categories.
- N. Gisin (Dept. de Phys. Théor., Univ. de Genève, CH-1211 Genève 4, Switzerland) A Simple Non-Linear Dissipative Quantum Evolution Equation.
- N. Gisin (Dept. de Phys. Théor., Univ. de Genève, CH-1211 Genève 4, Switzerland) Particles, Dynamics and Covariance.

- G.A. Hagedorn (Math. Phys. Lab., The Rockefeller University, New York, N.Y. 10021, USA) A Time Dependent Born-Oppenheimer Approximation.
- G.C. Hegerfeldt and S.N.M. Ruijsenaars (Physics Department, Princeton Univ., Princeton, N.J. 08544, USA) Remarks on Causality, Localization and Spreading of Wave Packets.
- L.P. Horwitz and A. Soffer (Dept. of Physics and Astronomy, Tel Aviv Univ., Ramat Aviv, Israel) On the Existence of the Wave Operator in Relativistic Quantum Scattering Theory.
- K.R. Ito (Dept. of Physics, Univ. of Bielefeld, 4800 Bielefeld 1, F.R.Germany and RIMS, Kyoto Univ., Kyoto 606, Japan) Absolute Bound of the Functional Determinant in (QED<sub>2</sub>). (Submitted, Phys. Letters B.)
- R. Lima, Centre de Physique Theor. du CNRS, Luminy Case 907, F-13288 Marseille, Cedex 2, France) Introduction to W\*-Categories.
- G. Lindblad (Dept. of Theoretical Physics, Royal Institute of Technology, S-10044 Stockholm, Sweden) A General H-Theorem for Quantum Stochastic Processes: Markovicity is Equivalent to a Monotone Loss of Information.
- H. Narnhofer (Inst. f. Theoretische Physik, Universität Wien, Wien, Austria) Another Definition for Time Delay.
- H. Narnhofer and W. Thirring (Inst. f. Theor. Physik, Universität Wien, Wien, Austria) Asymptotic Exactness of Finite Temperature Thomas-Fermi Theory.
- J. Naudts (Universiteit Antwerpen, Nederlande) Gaussian States on the Algebra of the Infinite Classical System.
- R.G. Newton (Physics Department, Indiana University, Bloomington, Indiana 47405, USA) Inverse Scattering, II: Three Dimensions. (Submitted, J. Math. Phys.)
- E. Onofri (Ist. di Fis. dell'Univ. di Parma, I-43100 Parma, Italy) A Modified Bars-Durgut Equation with Polynomial Eigenfunctions.
- K.R. Parthasarathy and K.B. Sinha (Indian Statistical Institute, Delhi Center, 7.S.J.S. Sansanwal Marg., New Delhi-110029, India) A Random Trotter-Kato Product Formula.
- L. Pittner (Inst. f. Theoretische Physik, Universität Wien, Wien, Austria) Rigorous Estimates of the  $e^-(\mu^-p)$  Scattering Amplitude below the  $\mu$  Excitation Threshold.
- A. Ronveaux (Dept. de Phys., Fac. Univ. N.D. de Is Paix, B-5000 Namur) and A. Magnus (Analyse Numérique, Univ. Cath. de Louvain, B-1348 Louvain-la-Nauve, Belgium) Van der Waals Energy between Voids and Particles. From asymptotic to Close Contact.
- R.N. Sen (Dept. of Math., Ben Gurion University of the Negev, Bersheba 84120, Israel) Fibre Bundels and Gauge Theories.
- B. Simon (Department of Physics, Princeton University, Princeton, N.J. 08544, USA) On the Decay of Correlations in Ferromagnets.
- R.F. Streater (Bedford College, London NW1 4NS, England) Random Cocycles and Gauge Fields.
- A. Uhlmann (Dept. Physics and NTZ of Karl-Marx-University, Leipzig, GDR) On Quantization in Curved Space Time.
- A. Uhlmann (Dept. Physics and NTZ of Karl-Marx-University, Leipzig, GDR) On Entropy in Quantum Statistics.
- Xia Dao-xing (Research Inst. of Mathematics, Fudan Univ., Shanghai, People's Republic of China) On the Representations of the Local Current Algebra and the Group of Diffeomorphisms (I). (Appeared, Scientia Sinica)

IAMP MEMBERSHIP LIST (ADDENDA)

- 559 Minlos R.A., Dept. of Math., Moscow State Univ., Moscow, USSR.  
 560 Ohya M., Dept. of Information Sciences, The Science Univ. of Tokyo,  
 278 Noda City, Chiba, Japan.  
 561 Kirillov A.A., Dept. of Math., Moscow State Univ., Moscow, USSR.  
 562 Gel'fand I.M., Lab. Math. Methods in Biology, Moscow State Univ., Mehmat,  
 Moscow 117234, USSR.  
 563 Surgailis D. Inst. of Math. and Cybernetics, Academy of Sciences of the  
 Lithuanian SSR, 232600, Vilnius, 54; K. Poželos st., USSR.  
 564 Tempelman A. Inst. of Math. and Cybernetics, Academy of Sciences of the  
 Lithuanian SSR, 232600, Vilnius, 54; K. Pozelos st., USSR.  
 565 Suhov Yu, Inst. for Problems of Information Transmission, 19 Ermolovoy st.  
 Moscow K-51, 103 51, USSR.  
 566 Vershik A.M., Math. Dept., State University, Leningrad, USSR.  
 567 Longo R., Istituto Matematico "G. Castelnuovo", Università di Roma, Città  
 Universitaria, 00100 Roma, Italy.  
 568 Nakajima H., Dept. of Engineering Math., Fac. of Engineering, Utsunomiya Univ.,  
 Utsunomiya 321-31, Japan.  
 569 Ghikas D.P.K., Lab. of Nuclear Technology, Polytechnic Faculty, Univ. of  
 Patras, Panepistimiopolis, Patras, Greece.  
 570 DeFacio B., Dept. of Math., Iowa State Univ., Ames, IA 50011, USA.  
 571 DeFalco D., Physics Dept., Princeton Univ., Princeton, N.J. 08544, USA.  
 572 Kaiser G., Math. Dept., Univ. of Lowell, Lowell, Mass. 01854, USA.  
 573 Jordan T.F., Phys. Dept., Univ. of Minnesota, Duluth, Minn. 55812, USA.  
 574 Trucano T., Dept. of Math., Univ. of New Mexico Albuquerque, N.M. 87131, USA.  
 575 Segal I.E., Math. Dept., M.I.T., Cambridge, Mass. 02139, USA.

CORRECTIONS

- 134 Feldman J.S., Dept. Math., Univ. British Columbia, Vancouver B C, Canada V6T, 1W5.  
 267 Lam C.S., Dept. Phys., McGill Univ., 3600 Univ. St., Montreal 101, Province  
 Quebec, H3A 2T5, Canada.  
 459 Takamoto H. → Takemoto H.  
 501 Westwater J., Dept. Math., C138 Padelford Hall, Univ. of Washington, Seattle,  
 Washington 98195, USA

IAMP NEWS BULLETIN

Progress Report

1. A vote is being taken from all IAMP members about the site of 1983 IAMP conference -- a choice between two proposals: Blacksburg, Virginia or Boulder, Colorado. So far 150 votes have been received. The decision on the site will be announced in the next issue of the News Bulletin.
2. We thank those members who have paid dues. We urge others to pay membership dues (\$10.00 for one year, \$30.00 for 3 years) into any of IAMP accounts, listed in December 24 (1979) issue of the News Bulletin. Those who can not pay dues for some reason should write to the IAMP President (H. Araki at the address below) asking for the reduced dues status, stating a reason. (Those who are granted the reduced dues status will be notified by the President.)
3. For your information, the countrywise distribution of the IAMP membership according to their mailing address is approximately as follows:
 

Australia (12), Austria (11), Belgium (15), Brazil (5), Bulgaria (3), Canada (12), China, People's Republic (1), Czechoslovakia (9), Denmark (5), Egypt (1), Finland (3), France (59), German Democratic Republic (8), Germany, Federal Republic (71), Greece (4), Hungary (2), India (13), Ireland (4), Israel (7), Italy (28), Japan (40), Korea, Republic (1), Malta (1), Morocco (1), Netherlands (7), New Zealand (1), Nigeria (3), Norway (3), Poland (15), Rumania (2), Singapore (1), Spain (8), Sweden (3), Switzerland (32), Turkey (1), Union of Soviet Socialist Republics (38), United Kingdom (35), United Kingdom Overseas, Hong Kong (2), United States of America (128) Venezuela (1), Yugoslavia (5).
4. For the sake of new members, any member can send his preprints or books for announcement in the News Bulletin to one of News Bulletin distribution center listed below. Due to typing problems, please indicate English translation of the title if it is written in other alphabets, such as Japanese, Russian, ... .

H. Araki

Conferences (\* indicates a new item, # a correction in an old item.)

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Scattering Theory, II Fermi-Thomas and Hartree-Fock Models and Their Applications, III Coulomb Systems, IV Born-Oppenheimer Approximation and its Applications, V Complex Systems.)

# Speakers who have accepted are: M. Aizenman, D. Brydges, J.M. Combes, V. Enss, J. Fröhlich, I. Herbst, J. Lebowitz, E. Lieb, D. Pearson, R. Seiler, W. Thirring. June 1 - 15, 1980 (June 1: Arrival day, June 15: Departure day)

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Symposium on Ergodic Theory, von Neumann Algebras and related topics, Warwick University, Feb. - July, 1981 (Research meeting)

Further information: Ms. Elaine Shiels, Mathematics Institute, University of Warwick, Coventry CV4 7AL, Great Britain.



- \* International Workshop on Large Order Perturbation Theory in connection with the "Sanibel Symposia", the Sheraton-Palm Coast Resort in Palm Coast, Florida, USA, March 2 - 4, 1981.

Further information: see detailed announcement below.

Durham Symposium on Operator Algebras, Durham, England, July 27 - Aug. 6, 1981. (Planned; Details are not yet complete.)

Further information: B. E. Johnson, J. R. Ringrose, Dept. of Pure Mathematics Univ. of Newcastle upon Tyne, Newcastle Upon Tyne NE1 7RU, England.

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\* Detailed Announcement of Conferences

International Workshop on Large Order Perturbation Theory in connection with the "Sanibel Symposia" at the Sheraton-Palm Coast Resort in Palm Coast, Florida, March 2 - 4, 1981.

Further information: This is a meeting being organized by J. Cizek, P. Lowdin (Director of the Sanibel Symposia) and B. Simon. It will be a meeting on divergent anharmonic oscillators, field ionization problems and atomic and molecular physics, phase transitions and quantum field theory.

Further inquiries should be sent to "Acting Director of Florida Palm Coast/Sanibel Symposia Quantum Theory Project", 365 Williamson Hall, University of Florida, Gainesville, Florida 32611, USA.

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Books

- A.O. Barut and R. Raçzka, Theory of Group Representations and Applications, PWN-Polish Scientific Publ., 717 pages. Now also available from: The University of Colorado Book Center, Attn: T. Cruff, Boulder, Colo.80309, USA.
- G. Gerlich (Lehrstuhl B für Theoretische Physik der Technischen Universität Braunschweig, West Germany) Vektor- und Tensorrechnung für die Physik, 1. Aufl., Braunschweig; Vieweg 1977 ISBN 3-528-03030-5.
- G. Kaiser and J.E. Marsden, editors, Geometric Methods in Mathematical Physics, Springer Lecture Notes in Mathematics, vol. 775, 1980.
- A. Ramm, Electromagnetic Wave Scattering by Small Bodies, Proc. of the Internal Symposium on Scattering and T-matrix, Columbus, Ohio, June 1979, Pergamon Press, N. Y., USA.

A. Ramm, Theory and Applications of Some Classes of Integral Equations, Springer-Verlag, N.Y., 1980.

O.I. Zavialov, Renormalized Feynman Diagrams (in Russian), in some limited amount available directly from the author at Steklov Mathematical Institute, Vavilov str. 42, Moscow USSR, 117333.

### Preprints

M. Aizenman and B. Simon (Dept. of Physics, Princeton Univ., Princeton, N.J. 08544, USA) Local Ward Identities and the Decay of Correlations in Ferromagnets (To appear, Commun. Math. Phys.).

P.M. Alberti, A. Uhlmann (Dept. of Physics and NTZ of Karl-Marx-University Leipzig, 701 Leipzig, German Democratic Republic) A Note on Stochastic Dynamics in the State Space of a Commutative  $C^*$ -algebra.

P.M. Alberti, A. Uhlmann (Dept. of Physics and NTZ of Karl-Marx-University Leipzig, 701 Leipzig, German Democratic Republic) Existence and Density Theorems for Stochastic Maps on Commutative  $C^*$ -algebra.

S. Albeverio (Fak. für Mathematik and Physik, Univ. Bielefeld, 4800 Bielefeld 1, West Germany), Ph. Blanchard (Fak. für Mathematik, Univ. Bochum, 4630 Bochum 1, West Germany) R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway) Feynman path integrals, the Poisson formula and theta function for the Schrödinger operators.

A. Alonso y Coria (Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas, Universidad Nacional Autónoma de México, Apartado Postal 20-726, México 20, D.F.) and B. Simon (Dept. of Physics, Princeton Univ., Princeton, N.J. 08544, USA) The Birman-Krein-Vishik Theory of Self-Adjoint Extensions of Semibounded Operators (To appear, Journal of Operator Theory).

M.D. Arthur, Henry Brysk, S.L. Paveri-Fontana and P.F. Zweifel (Laboratory for Transport Theory and Mathematical Physics, Virginia Polytechnic Inst. and State University, Blacksburg, VA 24061, USA) The Law of Radiative Decay.

T. Balaban (Inst. of Math. and Mechanics, Warsaw Univ., Krakowskie, Przedmieście 26-28, Warsaw 64, Poland) and K. Gawędzki (Inst. of Math., Gdansk Univ., Dept. of Mathematical Methods of Physics, Warsaw Univ., and Dept. of Physics, Harvard Univ., Cambridge, Mass. 02138, USA) A Low Temperature Expansion for the Pseudoscalar Yukawa Model of Quantum Fields in Tow Space-Time Dimensions.

C.M. Bender, F. Cooper, G.S. Guralnik, D.H. Sharp (Theoretical Division Los Alamos Scientific Laboratory, Los Alamos, New Mexico 87545), E. Mjølness (Dept. of Physics, Washington Univ., St. Louis, Missouri 63130) and H.A. Rose (Controlled Thermonuclear Research Division, Los Alamos Scientific Lab., Los Alamos, New Mexico 87545 USA) A Novel Approach to the Solution of Boundary Layer Problems (Submitted, Advances in Mathematics).

T.P. Beven and R. Delbourgo (Dept. of Physics, Univ. of Tasmania, Hobart, Tasmania 7001, Australia) One-Loop Equivalent Gauges.

Ph. Blanchard (Fak. für Physik, Univ. Bielefeld, 4800 Bielefeld 1, West Germany) Asymptotic Expansion of Fresnel Integrals Relative to a non Singular Quadratic Form.

J. Blank, P. Exner, M. Havlicek (Nuclear Centre, Faculty of Math. and Phys. of the Charles Univ., 18000 Prague, Czechoslovakia) and W. Lassner (Sektion Physik, Karl-Marx-University, Leipzig, GDR) Boson-Fermion Representations of Lie Superalgebras: An Example of  $osp(1,2)$ .

- J. Blank, P. Exner, M. Havlicek (Nuclear Center, Fac. of Math. and Phys. of the Charles Univ., areal Troja, Povitavska ul., 18000 Prague 8, Czechoslovakia) Quantum-Mechanical Pseudo-Hamiltonians.
- C. Bretin and J.P. Gazeau (Laboratoire de Chemie Physique de l'Université Pierre et Marie Curie, 11, rue Pierre Curie, F-75 231 Paris Cedex 05, France) Generalized Bessel Series and Multiplicities Problems in Complex Semi-Simple Lie Algebra Theory.
- J. Bricmont (Dept. of Math., Princeton Univ., Princeton, N.J. 08544, USA), J.L. Lebowitz (Dept. of Math. and Phys., Rutgers Univ., New Brunswick, N.J. 08903, USA) and C.E. Pfister (Dept. de Math., Ecole Polytechnique Federale de Lausanne 61, Av de Cour. CH-1007 Lausanne, Switzerland) Periodic Gibbs States of Ferromagnetic Spin Systems.
- Bricmont (Dept. of Math., Princeton Univ., Princeton, N.J. 08544, USA) and J.-R. Fontaine, J.L. Lebowitz, T. Spencer (Dept. of Math., Rutgers Univ., New Brunswick, N.J. 08903, USA) Perturbation Theory around a Massless Gaussian Lattice Field.
- F. Brownell (Math. Dept. Univ. of Washington, Seattle, Washington, 98195 USA) Spherical Harmonic Integrals and Second Quantized Dirac Hamiltonian Momentum Radial Reduction.
- R. Delbourgo (Dept. of Phys., Univ. of Tasmania, Hobart, Tasmania, Australia 7001) Solution of the Gauge Identities in the Axial Gauge (To appear, J. Phys. A).
- R. Delbourgo and B.W. Keck (Physics Dept., Univ. of Tasmania, Hobart, Tasmania, Australia 7001) Dynamically Broken Chiral Symmetry and the Gauge Technique (To appear, J. Phys. G).
- C. DeWitt-Morette, K.D. Elworthy, B.L. Nelson, and G.S. Sammelmann (Dept. of Phys., Univ. of Texas, Austin, Texas 78712, USA) A Stochastic Scheme for Constructing Solutions of the Schrödinger Equation.
- B. Ek (Dept. of Theoretical Physics, Royal Institute of Technology, S-100 44 Stockholm, Sweden) Euclidean Quantum Fields with Spin on an Indefinite Inner Product State Space.
- M. Friedrich, G. Lassner (Sektion Mathematik und Naturwissenschaftlich-Theoretisches Zentrum, Karl-Marx-Universität, 701 Leipzig, GDR) Rigged Hilbert Spaces and Topologies on Operator Algebras.
- J. Fröhlich, K. Streit and H. Zankel (Institut für Theoretische Physik, Universität Graz, 8010 Graz, Austria and Fak. für Physik, Universität Bielefeld, 4800 Bielefeld 1, West Germany) Coulomb Corrections in N-N Coupled States.
- J.P. Gazeau and A. Maguet (Laboratoire de Chimie Physique, 11, rue Pierre et Marie Curie, F-75231 Paris Cedex 05, France) A New Approach to the Two-Particle Schrödinger Bound State Problem.
- G. Grosse (Institut für Theoretische Physik, Univ. Wien, Wien, Austria) Quasi-classical Estimates on Moments of the Energy Levels.
- H.-R. Grümmer (Institut für Theoretische Physik, Univ. Wien, Wien, Austria) Quantum Mechanics in a Magnetic Field.
- E. Harrell (Dept. of Math., Johns Hopkins Univ., Baltimore, Md. 21218 USA) and B. Simon (Dept. of Phys., Princeton Univ., Princeton, N.J. 08544, USA) The Mathematical Theory of Resonances Whose Widths are Exponentially small.
- G.C. Hegerfeldt and S.N.M. Ruijsenaars (Joseph Henry Lab. of Physics, Princeton Univ., Princeton, N. J. 08544, USA) Remarks on Causality, Localization and Spreading of Wave Packets.

- K.-E. Hellwig (Institut für Theoretische Physik der Techn. Universität Berlin, Berlin, West Germany) Conditional Expectations and Duals of Instruments.
- K.R. Ito (RIMS, Kyoto Univ., Kyoto 606, Japan) Construction of Euclidean (QED)<sub>2</sub> via Lattice Gauge Theory, (I).
- G. Kaiser (Math. Dept., Univ. of Lowell, Lowell, Mass. 01854, USA) Holomorphic Gauge Theory (To appear, Geometric Methods in Mathematical Physics, G. Kaiser & J.E. Marsden, eds. Springer Lecture Notes in Mathematics vo. 775, 1980).
- G. Kaiser (Math. Dept., Univ. of Lowell, Lowell, Mass. 01854, USA) Relativistic Quantum Theory in Complex Spacetime (To appear, Differential-Geometrical Methods in Math. Phys.).
- M. Klaus (Dept. of Math., Univ. of Virginia, Charlottesville, Virginia 22903) and B. Simon (Dept. of Phys., Princeton Univ., Princeton, N.J. 08544, USA) Coupling Constant Thresholds in Nonrelativistic Quantum Mechanics, I. Short Range Two Body Case (Submitted, Ann. Phys.).
- H. Kunz (Laboratoire de Physique Theorique, E.P.F.L., Lausanne, Suisse) and B. Souillard (Centre de Physique Theorique, Ecole Polytechnique, 91128 Palaiseau Cedex, France) Sur le Spectre des Operateurs aux Differences Finies Aleatoires.
- E. Kyriakopoulos (Physics Laboratory A. National Technical Univ., Athens, Greece) Backlund Transformations and Exact Solutions of the Stationary Axially Symmetric Einstein Equations.
- G. Lassner (Sektion Physik, NTZ, Karl-Marx-Universität, 701 Leipzig, GDR) Continuity of State Functions of the Bose Gas.
- G. Lassner (Sektion Mathematik u. Naturwissenschaftlich-Theoretisches Zentrum, Karl-Marx-Universität, 701 Leipzig, GDR) The Dynamics of the BCS-Bogolubov Model in the Thermodynamical Limit.
- S.L. Levin (Dept. of Phys., Princeton Univ., Princeton, N.J. 08544, USA) Application of Dobrushin's Uniqueness Theorem to N-Vector Models (Submitted, Commun. in Math. Phys.).
- E. Lieb (Dept. of Physics, Princeton Univ., Princeton, N.J. 08544, USA) A Refinement of Simon's Correlation Inequality.
- G. Mack (II. Inst. für Theoretische Physik der Univ. Hamburg, Notkestr. 85, 2000 Hamburg 52, West Germany) Properties of Lattice Gauge Theory Models at Low Temperatures.
- J. Messer (Inst. voor Theoretische Fysica, Universiteit Leuven, 3030 Leuven, Belgium) Temperature Dependent Thomas-Fermi Theory.
- K. Miller and B. Simon (Dept. of Phys., Princeton Univ., Princeton, N. J. 08544, USA) Quantum Magnetic Hamiltonians with Remarkable Spectral Properties.
- J.D. Morgan III and B. Simon (Dept. of Phys., Princeton Univ., Princeton, N.J. 08544, USA) The Calculation of Molecular Resonances.
- N. Mukunda and L.C. Biedenharn (Phys. Dept., Duke Univ., Durham, North Carolina 27706, USA) and H. van Dam (Phys. Dept., Univ. of North Carolina, Chapel Hill, North Carolina 27514 USA) Composite Systems as Relativistic Quantal Rotators: Vectorial and Spinorial Models.
- M. Namiki and H. Yagisawa (Physical Science Lab., Div. of General Education, Takachiho College, 2-19-1 Ohmiya, Suginami-ku, Tokyo 168, Japan) and H. Nakamura (Dept. of Applied Phys., Fac. of Engineering, The Univ. of Tokyo, Bunkyo-ku, Tokyo 113, Japan) Rotationally Induced Transitions in Atomic Collisions: Two-State Model (J. Phys. B, 13, 1980, 743-756).

- T.F. Nonnenmacher and P.F. Zweifel (Lab. for Transport Theory and Mathematical Physics, Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061, USA) A Boltzmann Equation for Phonons and Electrons (To appear, Phys. Stat. Sol. (b), vol. 96, No. 2, 1979).
- E.P. Osipov (Dept. of Theor. Phys., Inst. for Math., 630090, Novosibirsk, 90, USSR) A Constructive Approach to the Polynomial Interaction in Four-Dimensional Space-Time.
- E.P. Osipov (Dept. of Theor. Phys., Inst. for Math., 630090, Novosibirsk, 90, USSR) Интеграл Фейнмана для Экспоненциального Взаимодействия в Четырёхмерном Пространстве-Времени.
- P. Perry, I. Sigal, and B. Simon (Depts. of Phys. and Math., Princeton Univ., Princeton, N.J. 08544, USA) Absence of Singular Continuous Spectrum in N-Body Quantum Systems.
- H. Primas (Lab. of Physical Chemistry, Swiss Federal Inst. of Technology, ETH-Zentrum, CH-8092, Zürich, Switzerland) Foundations of Theoretical Chemistry (To appear, Lecture Notes for the NATO Advanced Study Inst. on "Quantum Dynamics of Molecules: The New Experimental Challenge to Theorists", Sept. 15-29, 1979, Cambridge, England; Plenum Press, New York, 1980, ed. R.G. Woolley).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Electromagnetic Wave Scattering by Small Bodies (To appear, Nonlinear Vibration Problems).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Investigation of a Class of Systems of Integral Equations (To appear, Journ. Math. Anal. Appl.).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Investigation of a Class of Nonlinear Integral Equations and Calculations of Passive Nonlinear Networks (To appear, Nonlinear Vibr. Prob.).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Linear Filtering of Some Vectorial Nonstationary Random Processes (To appear, Mathematische Nachrichten).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) On a Class of Integral Equations (To appear, Mathematische Nachrichten).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) On Nonlinear Equations with Unbounded Operator (To appear, Math. Nachr.)
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) On Spectrum of Operator Schrödinger Equations (To appear, Rev. Roum. Math. Pure et Appl.).
- A. Ramm (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Perturbations Preserving Asymptotic of Spectrum of Linear Operators (To appear, Journ. Math. Anal. Appl.).
- A. Ramm and P. Mishnaevsky (Dept. of Math., The Univ. of Michigan, Ann Arbor, Mich. 48109 USA) Uniqueness Theorem of Use in General Relativity (To appear, Journ. Math. Anal. Appl.).
- M. Schechter (Yeshiva Univ., Amsterdam Avenue and 186th Street, New York, N.Y. 10033 USA) and R. Weder (Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Universidad Nacional Autonoma de Mexico, Apartado Postal 20-726, Mexico 20 D.F.) A Theorem on the Existence of Dyon Solutions.

- E. Seiler (Max-Planck-Institut für Physik und Astrophysik, Föhringer Ring 6, München, West Germany) Some Remarks on the Fermion Determinants in Gauge Theories.
- L. Streit (Fak. für Physik, Univ. Bielefeld, 4800 Bielefeld 1, West Germany) White Noise Analysis and the Feynman Integral.
- W. Thirring (Institut für Theoretische Physik, Univ. Wien, Wien, Austria) Bound with the Best Possible Constant for Coulomb Hamiltonians.
- L.E. Thomas (Dept. of Math., Univ. of Virginia, Charlottesville, Virginia 22903 USA) Stochastic Coupling and Thermodynamic Inequalities.
- R.L. Warnock (Lawrence Berkeley Lab., Univ. of California, Berkeley, Ca. 94720 USA) Matrix N/D Method with Absorption and the Unitarity Problem in Coupled-Channel Regge Theory (Submitted to Phys. Rev. D).
- R.L. Warnock (Lawrence Berkeley Lab., Univ. of California, Berkeley, Ca. 94720 USA) Dynamical Equations for a Regge Theory with Crossing Symmetry and Unitarity IV. Coupled Channels.

IAMP MEMBERSHIP LIST (CORRECTIONS)

- 554 Osipov E.P., Dept. of Theor. Phys., Inst. for Math., 630090, Novosibirsk, 90, USSR.
- 32 Bengura R. → Benguria R.
- 61 Brunig E. → Bruning E.
- 195 Harrell → Harrell E.
- 307 Menikoff T. → Menikoff R.

IAMP MEMBERSHIP LIST (ADDENDA)

- 576 Migdal A.A., L.D. Landau Institute for Theoretical Physics, Academy of Sciences, Vorobyevskoe Shosse 2, 117334 Moscow, USSR.
- 577 Mardin A., Dept. of Mathematics, Bedford College, Regent's Park, London, NW1 4NS, Gt. Britain.
- 578 Bogoyavlensky O., L.D. Landau Institute for Theoretical Physics, Academy of Sciences, Vorobyevskoe Shosse 2, 117334 Moscow, USSR.
- 579 Nahapetian B., Inst. of Math., Armenian Academy of Sciences, Barekamutian st. 24 B. 375019, Erevan-19, Armenia, USSR.
- 580 Pogosian S., Inst. of Math., Armenian Academy of Sciences, Barekamutian st. 24 B, 375019, Erevan-19, Armenia, USSR.
- 581 Carmona R., Dept. de Mathématiques, Univ. de Saint Etienne, 23 rue P. Micheclon, 42023 Saint Etienne Cédex, France.
- 582 Perk J.H.H., Inst. for Theoretical Physics, State Univ. of New York at Stony Brook, Long Island, NY 11794, USA.
- 583 Vladimirov V.S., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 584 Horyshy S.S., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 585 Zharinov V.V., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 586 Zavyalov B.I., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 587 Drozhzhinov Yu.N., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st. 42, USSR.
- 588 Arefyeva I.Ya., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 589 Pogrebkov A.K., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 590 Volovich I.V., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 591 Zinoviev Yu.M., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 592 Holevo A.S., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 593 Tserkovnikov Yu.A., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 594 Sirugue-Collin M., Centre de Physique Theorique, C.N.R.S.-Luminy, Case 907, F-13288 Marseille Cedex 2, France.
- 595 D'Antoni C., Istituto de Fisica "G. Marconi", Universita, Piazzale delle Scienze 5, 00185 Roma, Italy.
- 596 Zubarev D.N., Steklov Inst. of Mathematics, Moscow V-333, Vavilova st., 42, USSR.
- 597 Klöckner K., Inst. für Angewandte Mathematik der Johann Wolfgang Goethe-Univ. Frankfurt, Robert-Mayer-str. 6-10, D-6000 Frankfurt, West Germany.
- 598 Ströter B., Inst. für Angewandte Mathematik, Univ. Frankfurt, Robert-Mayer-str. 6-10, 6 Frankfurt 1, West Germany.
- 599 Kulish P.P., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 600 Popov V.N., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 601 Takhtajan L.A., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 602 Semenov-Tian-Shansky M.A., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 603 Korepin V.E., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 604 Reyman A.G., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.
- 605 Sklianin E.K., Leningrad branch of the V.A. Steklov Mathematical Inst., Fontanka 27, Leningrad, 191011, USSR.

Change of Address

- 194 Hansen F., RIMS, Kyoto Univ., Kyoto 606, Japan. (until Jan. 31, 1981)
- 326 Namiki M. Physical Science Lab., Division of General Education, Takachiho College, Ohmiya 2-19-1, Suginami-ku, Tokyo 168, Japan.
- 527 Dunlop F., Ecole Polytechnique, Centre de Physique Theorique, 91128 Palaiseau Cedex, France.
- 551 Ek B.Y.L., Dept. of Theoretical Physics, Royal Institute of Technology, S-100 44 Stockholm, Sweden.

## IAMP NEWS BULLETIN

Progress Report

1. A meeting of the Executive Committee was held on September 26, 1980 in Stockholm with the following agenda.
  1. VII International Conference on Mathematical Physics to be held at Boulder, Colorado in 1983.
  2. Election of members of the IAMP Executive Committee for the next term (Jan. 1982 - Dec. 1984).
  3. The amount of dues for Associate Members.
  4. Budget for 1980 and 1981.
  5. Reduced rate subscriptions of journals for IAMP members.
  6. Category C relation with UNESCO.
  7. Relation with U.S. Internal Revenue Service.
  8. Request by Spohn.
  9. Sponsorship of a conference.
2. The financial report for the year 1979 is as follows:

The central account of the Association is kept by the account's department of the Faculty of Science at the University of Geneva. On December 19th it contained FS 240.13, provided by four membership dues for three years (FS 204.-), added to the balance FS 36.13 of the previous year. In August 79 the Association opened an account at the First National Bank of Princeton. In the end of December, the income was US\$1,500.- in membership dues while the expenditures were as follows:

US\$	4.60	rubber stamp for check deposits
	98.50	reproduction of October 1979 Bulletin and Membership list (25 pages)
	50.--	postage for October mailing
	37.05	printing of December 1979 Bulletin
	19.20	postage for December mailing
	<u>209.35</u>	

In September 1979 the Association opened an account at the Sparkasse Bielefeld. As of December 12th, 1979 this account was balanced by a credit of DM 2,301.30, due to membership dues minus the bank fees. On September 6th, 1979, an account was opened at the Dai-ichi Kangyo Bank in Kyoto. On December 30, 1979 this account was balanced by a credit of ¥141,900 due to membership dues minus expenditure ¥5,500 for printing.

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\* News Bulletin published by the International Association of Mathematical Physics and distributed to its members.

\* All items for inclusion in this Bulletin, except possibly for preprints and books, should be sent with a clear indication that it is "for IAMP News Bulletin" to

Professor H. Araki, RIMS, Kyoto University, Kyoto 606, JAPAN.

\* Preprints and books to be announced in this Bulletin may be sent either to H. Araki at the above address or to one of the following addresses:

Mrs. Elisabeth Bähr, c/o Prof. L. Streit, Fakultät für  
Physik, Universität Bielefeld, 4800 Bielefeld 1, BRD

Mrs. Grace Anderson, c/o Prof. A. S. Wightman, Jadwin Hall,  
Princeton University, P.O.Box 708, Princeton, N.J. 08544, USA.



3. The budget for the year 1980 is as follows:

<u>Income</u>	<u>Expenditures</u>
Dues: \$5,000.-	Printing: \$500.-
Carry-over:	Postage and Related: \$300.-
(1) \$1290.65	Miscellaneous: \$100.-
(2) SF 240.13 = \$141.25	Travel Support: \$328.23
(3) DM 2,301.20 = \$1278.50	Carry-over: \$7572.10
(4) Yen 141,900 = \$695.70	
Interest: \$66.-	<hr/>
Gift: SF 558.- = \$328.23	Total: \$8800.33
<hr/>	
Total: \$8800.33	

A few comments on the budgets will be appropriate. The income from membership dues includes the dues for 1981 and 1982 as well. The expenditure is mostly coming from the distribution of News Bulletin, and the figure is much lower than (possibly one-third of) what it actually costs thanks to kindness of distribution centers, in addition to the fact that secretarial works are offered free of charge at the moment. As a result, we seem to be able to carry-over some amount of fund to subsequent years. This situation might not continue with the future change of distribution centers.

4. The budget for the year 1981.

<u>Income</u>	<u>Expenditures</u>
Dues: \$500.-	Printing: \$550.-
Carry-over: \$7572.10	Postage and Related: \$330.-
<hr/>	Miscellaneous: \$120.-
Total: \$8072.10	Support for Berlin Conf.: \$1000.-
	Carry-over: \$6072.10
	<hr/>
	Total: \$8072.10

The same comments as the previous item applies here.

5. The reduced rate subscription of Communications on Mathematical Physics, which has been described in IAMP News Bulletin July 1, 1980 issue, has been approved by the Executive Committee and the final negotiation with Springer is under way. I expect to be able to announce the method of such a subscription in the next issue of the News Bulletin. Those who have answered the questionnaire will receive an individual notice possibly at an earlier stage.

6. D. Reidel Publishing Company has proposed the following reductions for IAMP members, which is approved by the Executive Committee:

Discount of 40% on the regular private subscription rate for "Letters in Mathematical Physics" and discount of 15% on each volume of books in the series "Mathematical Physics Studies".

You will be receiving some leaflet from D. Reidel Publishing Company about how to make subscription at the reduced rate.

7. Our Association is now admitted to the mutual information category relation (Category C) by UNESCO. This enables us to apply to UNESCO for a fund to finance participation from developing countries to the Berlin Conference, for example.

8. A rough schedule for the Berlin Conference in 1981 is now decided as follows. Negotiation in appointing invited speakers in general plenary session and session organizers is being carried out.

Date

Aug. 11 (Tue.)	Registration, Opening Session; Stat. Mechanics (GPS)
12 (Wed.)	Quantum Field Theory (SPS); Stat. Mechanics (SPS)
13 (Thu.)	Quantum Field Theory (GPS), Fluid Dynamics (GPS); Free time.
14 (Fri.)	i) Group Theory ii) Found. Quantum Mech. (PS); Status Report Elem. Particles, General Meeting IAMP
15 (Sat.)	i) Funct. Integration (PS); Free time. ii) Open
16 (Sun.)	Free time; i) Quant. Mech. (PS) ii) Operator Algebras (PS)
17 (Mon.)	Status rep. Gen. Rel. + Cosmology, Gravitation (SPS); Gravitation (SPS).
18 (Tue.)	Group Theory (GPS including rapporteur talk on PS); Quantum Mechanics (GPS including rapporteur talk on PS).
19 (Wed.)	Rapporteur talks on Found. of QM, Operator Alg., Funct. Integration, Open; Nonlinear Analysis and Integrable Systems (SPS).
20 (Thu.)	Nonlinear Analysis and Integrable Systems (GPS);

The semicolon separates the morning and afternoon sessions.

GPS: General Plenary Session

SPS: Special Plenary Session (main responsibility with session organizer)

PS: Parallel Session (main responsibility with session organizer).

Conferences (\* indicates a new item, # a correction in an old item.)

- \* International Conference on Generalized Functions and their Applications in Mathematical Physics, Moscow, USSR, Nov. 24 - 28, 1980.  
Further information: see detailed announcement on page 4.
- \* International Symposium on Foundation of Mechanics (Classical, Relativistic and Quantum), Calcutta Univ., Calcutta, India, Dec. 27, 1980 - Jan. 1, 1981.  
Further information: see detailed announcement on page 4.
- \* Conference on Nonlinear Problems in Science, Rice Univ., Houston, TX, USA, Feb. 25 - 28, 1981.  
Further information: see detailed announcement on page 5.

Symposium on Ergodic Theory, von Neuman Algebras and related topics, Warwick University, Feb. - July, 1981 (Research meeting).

Further information: Ms. Elaine Shiels, Mathematics Institute, University of Warwick, Coventry CV4 7AL, Great Britain.

International Workshop on Large Order Perturbation Theory in connection with the "Sanibel Symposia", the Sheraton-Palm Coast Resort in Palm Coast, Florida, USA, March 2 - 4, 1981.

Further information: "Acting Director of Florida Palm Coast/ Sanibel Symposia Quantum Theory Project", 365 Williamson Hall, University of Florida, Gainesville, Florida 32611, USA.

Durham Symposium on Operator Algebras, Durham, England, July 27 - Aug. 6, 1981.  
Further information: B. E. Johnson, J. R. Ringrose, Dept. of Pure Mathematics,  
Univ. of Newcastle upon Tyne, Newcastle Upon Tyne NE1 7RU,  
England.

VI International Conference on Mathematical Physics, Freie Universität Berlin  
(West Berlin), Aug. 11 - 20, 1981. See the item 8 on page 3 of this issue and  
the item 2 of the Progress Report in Oct. 16, 1979 issue of this bulletin for  
the organizational structure and subject matters.

- \* International Symposium -Stochastic Processes and Applications to Differential  
Operators of Mathematical Physics- Processus Stochastiques et Applications aux  
Opérateurs Différentiels de la Physique Mathématique, C.I.R.M. Marseille-Luminy  
France, Aug. 24 - 28, 1981. A detailed announcement (including names of invited  
lecturers) will appear in the next issue of this Bulletin.  
Further information: René Carmona, Dept. Math., Université de Saint Etienne  
23 rue P. Michelon, 42023 SAINT ETIENNE Cédex, FRANCE.

Detailed Announcement of Conferences

International Conference on Generalized Functions and their Applications in Physics.  
24 - 28 November, 1980 Moscow.

Organizers: Steklov Mathematical Institute and Computer Center of the Academy  
of Science of the USSR under the sponsorship of IMU. Chairman of  
Organizing Committee: V.S. Vladimirov.

Topics: A. General theory of generalized functions and hyperfunctions.  
B. Integral transformations and operational calculus.  
C. Generalized functions in mathematical physics.

Participants: Around 150 actively working mathematicians including 50 from abroad,  
under individual invitations.

Address of organizing committee: Dr. A. Pogrebkov (Secretary), Steklov Mathematical  
Institute, Vavilova Street, 117966, GSP-1, Moscow,  
USSR.

It is the regular Conference from 1966. The first one was in Poland, next in  
Yugoslavia, DDR, Bulgaria and BDR (in 1978).

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International Symposium on Foundation of Mechanics (Classical, Relativistic  
and Quantum)

Director: Professor C. K. Majumdar

Date: December 27, 1980 - January 1, 1981

Venue: Satyendranath Bose Institute of Physical Sciences, Calcutta University,  
92, Acharya Prafulla Chandra Road, Calcutta-700 009, India.

The following are amongst those who will be invited to deliver lectures:

P. Supes (U.S.A.), J.L. Erickson (U.S.A.), A.C. Eringen (U.S.A.), A. Mercier  
(Switzerland), H. Arzelies (France), R. Haag (W. Germany), W. Heitler (Zürich),  
B. Simon (U.S.A.), W. Thirring (Vienna), S.J. Bhattacharyya (C. U.),  
A.K. Raychaudhuri (Calcutta), Kalidas Bhattacharyya (Santi Niketan).  
G. Bandyopadhyay (Calcutta), S. Datta Majumdar (Calcutta), S.P. Gupta (U.G.C.),  
R.L. Das Verma (Mazaffarpur), E.C.G. Sudarshan (Bangalore & U.S.A.), N. Mukunda  
(Bangalore), N.D. Sengupta (Bombay), R. Abraham (Princeton), V. Arnold (U.S.S.R.),  
Y. Sinai (U.S.S.R.), V. Singh (T.I.F.R.), P.G. Bargman (U.S.A.), G. Mackey (U.S.A.)

I. Segal (U.S.A.), E. Schmutzer (E. Germany), B. de Witt (U.S.A.), C. Piron (Switzerland), S. Varadraján (U.S.A.), R. Penrose (U.K.), H. Primas (Switzerland), C. Truesdell (U.S.A.), S. Bharatha (U.S.A.), D. Bohm (U.K.), F.J. Belinfante (U.S.A.), C.K. Majumdar (Calcutta), M. Dutta (Calcutta), A. Held (Switzerland), C.N. Kaul (Kharagpur).

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NONLINEAR PROBLEMS IN SCIENCE  
February 25-28, 1981  
Rice University, Houston, TX

Program:

This will be an interdisciplinary conference to review recent developments in the solution of global nonlinear problems in partial differential equations which arise in several different sciences. The problems together with the ideas and techniques used in their solution will be presented in a manner accessible to scientists in all fields which use partial differential equations, and to mathematical experts in partial differential equations. Topics will include quantum field theory, relativity, inverse problems in geophysics, earthquakes and fractures, diffusion and reaction processes in biology and chemistry, and the kinetics of phase transitions.

Speakers:

A. Jaffe, I. M. Singer, S. T. Yau, R. Geroch, N. Bleistein, V. Barcilon, R. Burrige, J. Rice, S. Kauffman, R. Aris, M. Kac, J. B. Keller, J. Langer, J. L. Lebowitz and others.

Information:

John C. Polking  
Department of Mathematics  
Rice University  
Box 1892  
Houston, TX 77001, USA.

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We have included in the above list of conferences some information which is of tentative nature. The purpose of this list is two-fold: First to inform IAMP members about future conferences for their choice and preparation. Second to inform the organizers of conferences about other conferences for a possible avoidance of conflict. Therefore we would appreciate very much being informed about any conference which some mathematical physicists might attend, even though the information might be tentative or incomplete. If the organizer agrees, we will also include conferences at a planning state.

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Books

Quantum Fields, Algebras, Processes, edited by Ludwig Streit, Fakultät für Physik, Universität Bielefeld, Springer-Verlag Vienna New York, with contributions by S. Albeverio, J. Bellissard, Ph. Blanchard, O. Bratteli, P. Collet, Ph. Cpmbe, J. Cuntz, J.-P. Eckmann, V. Enss, H. Föllmer, J. Fröhlich, M. Fukushima, G. Gallavotti, T. Hida, Y. Higuchi, R. Höegh-Krohn, H. Hogreve, B. Lochum, G. Jona-Lasinio, J.R. Klauder, P. Krée, E.E. Lanford, R. Lima, P.-A. Meyer, S. Miracle-Sole, Chr. Preston, J.E. Roberts, R. Rodriguez, R. Schrader, R. Seiler, M. Sirugue, M. Sirugue-Collin, K. Symanzik, M. Takesaki.

Please note that the person in charge of IAMP preprint list in Bielefeld changed to Mrs. Elisabeth Bähr (from Mrs. C. Voigt-Djuran).

Preprints

- P.B. Abraham (Naval Underwater Systems Center, New London Connecticut 06385 USA) B. DeFacio (Ames Laboratory-USDOE and Dept. of Mathematics, Iowa State University, Ames, Iowa 50011, USA), and H.E. Moses (Univ. of Lowell Center for Atmospheric Research, Lowell, Mass. 01854, USA)  
An Explicit Example of a Local and Non-Local Potential Whose Hamiltonians are Unitarily Equivalent and Whose Scattering Operators are Identical (To appear, Studies in Applied Mathematics).
- S. Albeverio (Ruhr-Universität Bochum, Mathematisches Institut, 4630 Bochum, FRG), R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway), & D. Testard (Dept. de Physique, Université d' Avignon et Centre de Physique Théorique, C.N.R.S., Marseille, France) Irreducibility and Reducibility for the Energy Representation of the Group of Mappings of a Riemannian Manifold into a Compact Semisimple Lie Group.
- S. Albeverio (Fak. für Mathematik, Universität Bielefeld, 4800 Bielefeld 1, FRG) and R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway) Martingale Convergence and the Exponential Interaction in  $R^n$ .
- S. Albeverio (Fak. für Mathematik, Universität Bielefeld, 4800 Bielefeld 1, FRG) and R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway) Point Interactions as Limits of Short Range Interactions.
- S. Albeverio (Ruhr-Universität Bochum, Mathematisches Institut, 4630 Bochum, FRG) and R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway) Stochastic Flows with Stationary Distribution.
- S. Albeverio (Fak. für Mathematik, Universität Bielefeld, 4800 Bielefeld 1, FRG) and R. Høegh-Krohn (Matematisk Institutt, Universitetet i Oslo, Oslo, Norway) Uniqueness and Global Markov Property for Euclidean Fields and Lattice Systems.
- J.E. Avron (IBM Research Labs., Yorktown Hts. NY 10598, USA), G. Roepstorff (Inst. for Advanced Study, Princeton, USA), and L.S. Schulman (Division of Mathematics, Caltech. Pasadena, USA) Ground State Degeneracy and Ferromagnetism in a Spin Glass.
- J.E. Avron (Dept. of Physics, Technion, Haifa, Israel), I.W. Herbst (Dept. of Mathematics, Univ. of Virginia, Charlottesville, Va. 22903, USA) and B. Simon (Mathematics Dept., California Institute of Technology, Pasadena, Calif. 91125 USA for 1980/1981) Schrödinger Operators with Magnetic Fields, III Atoms in Homogeneous Magnetic Field.
- L Banyai and P. Gartner (Central Inst. of Physics, Inst. for Physics and Technology of Materials, Bukarest, P.O.B. 5207, Romania) On the Connection between the Macroscopical and Microscopical Evolution in an Exactly Soluble Hopping Model 1. Neutral Particles.
- L. Banyai and P. Gartner (Central Inst. of Physics, Inst. for Physics and Technology of Materials, Bukarest, P.O.B. 5207, Romania) On the Connection between the Macroscopical and Microscopical Evolution in an Exactly Soluble Hopping Model. 2. Charged Particles.

- R. Beig & W. Simon (Inst. für Theor. Physik, Universität Wien, A-1090 Wien)  
On the Multipole Expansion for Stationary Space-Times.
- B. Borden (Physics Department, Univ. of Texas, Austin, Texas 78712, USA) and  
C. Radin (Mathematics Department, Univ. of Texas, Austin, Texas 78712  
USA) The Crystal Structure of the Noble Gases<sup>a</sup> (To appear, J. Chem.  
Phys.).
- O. Brander (Insti. of Theoretical Physics, S-41296 Göteborg) and K. Chadan  
(Laboratoire de Physique Théorique et Hautes Energies, Univ. de Paris-  
Sud, F-91405 Orsay) A Tauberian Theorem in Quantum Mechanical Inverse  
Scattering Theory.
- J. Bricmont (Department of Mathematics, Princeton University, Princeton, New  
Jersey 08544, USA), J.-R. Fontaine, J.L. Lebowitz, and T. Spencer (Dept.  
of Mathematics, Rutgers University, New Brunswick, New Jersey 08903, USA)  
Lattice Systems with a Continuous Symmetry I. Perturbation Theory for  
Unbounded Spins, II. Decay of Correlations.
- J. Bricmont (Department of Mathematics, Princeton University, Princeton, New  
Jersey 08544, USA), J.-R. Fontaine, J.L. Lebowitz, and T. Spencer (Dept.  
of Mathematics, Rutgers University, New Brunswick, New Jersey 08903, USA)  
E.H. Lieb (Dept. of Mathematics and Physics, Princeton University,  
Princeton, New Jersey 08544, USA) Lattice Systems with a Continuous  
Symmetry III. Low Temperature Asymptotic Expansion for the Plane Rotor  
Model.
- G. Casati (Inst. di Fisica dell'Univ., Via Celoria, 16, 20133 Milano, Italy),  
I. Guarneri (Inst. di Matematica, Univ. de Pavia, Pavia, Italy), and  
F. Valz-Gris (Inst. di Fisica dell'Univ., Via Celoria 16, 20133 Milano,  
Italy) On the Connection between Quantization of Nonintegrable Systems  
and Statistical Theory of Spectra.
- K. Chadan (Laboratoire de Physique Théorique et Hautes Energies, Univ. de Paris-  
Sud, F-91405 Orsay Cedex and Ch. de Mol, Dept. de Mathém, Univ. Libre  
de Bruxelles, B-1050 Bruxelles) Sufficient Conditions for the Existence  
of Bound States in a Potential without Spherical Symmetry.
- T.E. Clark, R. Menikoff, and D.H. Sharp (Theoretical Division, Los Alamos Scientific  
Laboratory, University of California, Los Alamos, New Mexico 87545, USA)  
Quantum Mechanics on the Half-Line Using Path Integrals.
- H.L. Cycon (Technische Universität Berlin, Fachbereich 3, 1000 Berlin 12, FRG)  
On the Form Sum and the Friedrichs Extension of Schrödinger Operators  
with Singular Potentials.
- E.B. Davies (St. John's College, Oxford, OX1 3JP, England) Asymptotic Modifi-  
cations of Dynamical Semigroups on C\*-Algebras.
- E.B. Davies (St. John's College, Oxford, OX 1 3JP, England) and M.D. Srinivas  
(Dept. of Theoretical Physics, Univ. of Madras, Guindy Campus, Madras-  
600 025, India) Photon Counting Probabilities in Quantum Optics.
- J. Dimock (Institute for Advanced Study, Princeton, New Jersey 08540, USA)  
Dirac Quantum Fields on a Manifold.

- P. Exner and G.I. Kolerov (Joint Inst. for Nuclear Research, Dubna, USSR)  
On Hilbert Spaces of Paths (Submitted, Czech. J. Phys. B).
- P. Federbush (Dept. of Mathematics, University of Michigan, Ann Arbor, Michigan  
48109 USA) Some Diamagnetic Inequalities for Partial Partition  
Functions of Lattice Fields.
- P.G. Federbush (Dept. of Mathematics, University of Michigan, Ann Arbor, Mich.  
48109 USA) A Mass Zero Cluster Expansion, Part 1. The Expansion,  
Part 2, Convergence.
- J. Fröhlich (IHES, F-Bures-sur-Yvette, F-91440 France), G. Morchio (Istituto di  
Fisica dell'Università di Pisa, Italy) and F. Strocchi (Scuola Normale  
Superiore, INFN, Pisa, Italy) Higgs Phenomenon without a Symmetry  
Breaking Order Parameter.
- F. Gallone (Istituto di Scienze Fisiche dell'Università via Celoria 16, I-20133  
Milano) and A. Sparzani (Istituto Nazionale di Fisica Nucleare, Sezione  
di Milano) A Uniqueness Result for the Segal Quantization of a Classical  
System with Symmetries.
- F. Gallone (Istituto di Scienze Fisiche dell'Università via Celoria 16, I-20133  
Milano) and A. Sparzani (Istituto Nazionale di Fisica Nucleare, Sezione  
di Milano) On the Uniqueness of the Segal Quantization.
- F. Gesztesy (Inst. für Theor. Physik, Universität Graz-A-8010 Graz) On the  
Structure of Coulomb-type Scattering Amplitudes.
- F. Hansen (Dept. de Physique Theorique, Univ. de Geneve, 1211 Geneve 4, Switzerland  
and Matematisk Inst. Universitetsparken 5, DK-2100 Copenhagen) Quantum  
Mechanics in Phase Space.
- F. Hansen (RIMS, Kyoto Univ., Kyoto 606, Japan and Matematisk Inst. Universitet-  
sparken 5, DK-2100 Copenhagen, Denmark) Selfadjoint Means and Operator  
Monotone Functions.
- E.M. Harrell (Dept. of Mathematics, The Johns Hopkins University, Baltimore,  
Maryland 21218 USA) On the Effect of the Boundary Conditions on the  
Eigenvalues of Ordinary Differential Equations (Submitted, Hartman  
Festschrift).
- G. Hegerfeldt (Institut für Theoretische Physik, Bunsenstr. 9, D-3400 Göttingen  
W. Germany) and G. Sandri (Aeronautical Research Association of Princeton  
Inc., 50 Washington Road, P.O. Box 2229, Princeton, N.J. 08540, USA)  
Moment Inequalities and Statistical Constraints with Applications to  
Turbulence Experiments.
- I.W. Herbst (Dept. of Mathematics, Univ. of Virginia, Charlottesville, Virginia  
22903 USA) Contraction Semigroups and the Spectrum of  $A_1 \otimes I + I \otimes A_2$ .
- I.W. Herbst (Dept. of Mathematics, Univ. of Virginia, Charlottesville, Virginia  
22903 USA) and B. Simon (Dept. of Mathematics and Physics, Princeton  
Univ., Princeton, N.J. 08544, USA) Dilation Analyticity in Constant  
Electric Field, II: N-Body Problem, Borel Summability (To be Submitted,  
Commun. Math. Phys.).

- J. Hietarinta (Research Institute for Theoretical Physics, Univ. of Helsinki, Helsinki, Finland) and D. Nemeschansky (Dept. of Technical Physics, Helsinki University of Technology, Espoo, Finland) Correcting the Kink Gas Double Counting by an Effective Potential.
- L.P. Horwitz and E. Katsnelson (Dept. of Physics & Astronomy, Tel Aviv Univ., Ramat Aviv, Israel) A Partial Inner Product Space of Analytic Functions for Resonances.
- L.P. Horwitz and Y. Lavie (Dept. of Physics & Astronomy, Tel Aviv Univ., Ramat Aviv, Israel) Scattering Theory in Relativistic Quantum Mechanics.
- W. Hunziker and E. Vock (Inst. für Theor. Physik, ETH-Hönggerberg, CH-8093, Zürich, Switzerland) Weyl's Criterion and Perturbation Theory.
- A. Jensen (Dept. of Mathematics, Univ. of Kentucky, Lexington, KY 40506, USA) The Scattering Cross Section and its Born Approximation at High Energies.
- Yu. N. Kafiev (Dept. of Theor. Physics, Inst. of Mathematics, 630090 Novosibirsk 90, USSR) Four-Dimensional  $\sigma$ -Models and Geometry of Yang-Mills Fields.
- G. Kaiser (Dept. of Mathematics, Univ. of Lowell, Lowell, Mass. 01854, USA) Quantization, Relativity, Localization, and Gauge Freedom.
- M.W. Kalinowski (Institute of Philosophy and Sociology, Polish Academy of Science, Nowy Swiat 2, 00-330 Warsaw, Poland) Gauge Fields with Torsion, Part I.
- N.W. Kalinowski (Institute of Philosophy and Sociology, Polish Academy of Science, Nowy Swiat 2, 00-330 Warsaw, Poland) Gauge Fields with Torsion, Part II.
- E. Kapuscik (Institute of Nuclear Physics, Vracow, Poland) How the Relativistic Space-Time Looks Like from the Non-Relativistic Point of View?
- K. Kraus (Phys. Institut der Univ. Würzburg, 8700 Würzburg, FRG) and R.F. Streater (Dept. of Mathematics, Bedford College, Regents Park, London NW1 4NS, England) Some Covariant Representations of Massless Fermi Fields.
- R. Lavine (Dept. of Mathematics, Univ. of Rochester, Rochester, New York 14627, USA) The Local Spectral Density and Its Classical Limit.
- D. Masson (Dept. of Mathematics, Univ. of Toronto, Toronto M5S 1A1, Canada) Moment Problem Approximants to the Chandrasekhar H-Equation.
- F. Mathot (Inst. de Phys. Theor., Universite Catholique de Louvain, B-1348 Louvain-la-Neuve) Distribution - Like Representation of  $*$ -Algebra.
- B. McCoy and J.H.H. Perk (Institute for Theoretical Physics, State University of New York at Stony Brook, Stony Brook, New York 11794, USA) Continuous Exponents of Spin Correlation Functions of Inhomogeneous Layered Ising Models (Submitted, Springer Lecture Notes).
- J. Messer (Institut voor Theoretische Fysica, Universiteit Leuven, B-3030 Leuven) Existence of a Gravitational Phase Transition.
- J. Messer (Institut voor Theoretische Fysica, Universiteit Leuven, B-3030 Leuven) Existence of a Phase Transition in a System of Gravitation Fermions.



- V.V. Molotkov, I.T. Todorov (Institute of Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, Sofia 1184/Bulgaria) Gauge Dependence of World Lines and Invariance of the S-Matrix in Relativistic Classical Mechanics.
- Y. Ne'eman and S. Sternberg (Tel Aviv Univ., Tel Aviv, Israel) Internal Supersymmetry and Unification.
- Y. Ne'eman and S. Sternberg (Tel Aviv Univ., Tel Aviv, Israel) Color in Internal Supersymmetry and Unification.
- C.M. Newman and A.L. Wright (Department of Mathematics, University of Arizona Tucson, Arizona 85721 USA) An Invariance Principle for Certain Dependent Sequences (Submitted, Ann. Prob.).
- C.M. Newman (Department of Mathematics, University of Arizona, Tucson, Arizona 85721 USA) and L.S. Schulman (Department of Physics, Technion, Haifa Israel) Complex Free Energies and Metastable Lifetimes (To appear, J. Stat. Phys).
- C.M. Newman (Department of Mathematics, University of Arizona, Tucson, Arizona 85721 USA) and L.S. Schulman (Department of Physics, Technion, Haifa, Israel) Infinite Clusters in Percolation Models (Submitted, J. Stat. Phys.).
- L.W.J. den Ouden (Institut voor Theoretische Fysica, Universiteit Nijmegen, Nijmegen, The Netherlands) H.W. Capel (Institut-Lorentz, Nieuwsteeg 18, Leiden, The Netherlands) and J.H.H. Perk (Institute for Theoretical Physics, State University at Stony Brook, Long Island, N.Y. 11794 USA) Critical-Exponent Renormalization, First-Order Transitions and Demagnetizing Effects for Schofield's Linear Model (Submitted, Physica A)..
- E.P. Osipov (Dept. of Theor. Physics, Inst. for Math., 630090 Novosibirsk, 90 USSR). A constructive approach to the  $\epsilon_4$  quantum field theory.
- E.D. Osipov (Dept. of Theor. Physics, Inst. for Math., 630090 Novosibirsk, 90 USSR). Feynman Integral for the Exponential Interaction in Four-Dimensional Space - Time II (In Russian).
- J.H.H. Perk and Z. Popowicz (Institute for Theoretical Physics, State University of New York at Stony Brook, Stony Brook, New York 11794 USA) Comment on "New Exact Solution of the Classical Sine-Gordon Equation in 2+1 and 3+1 Dimensions" (Submitted, Phys. Rev. D).
- J.H.H. Perk (Institute for Theoretical Physics, State University of New York at Stony Brook, Stony Brook, New York 11794 USA) Equations of Motion for the Transverse Correlations of the One-Dimensional XY-model at Finite Temperature (To appear, Phys. Lett. A).
- J.H.H. Perk (Institute for Theoretical Physics, State University of New York at Stony Brook, Stony Brook, New York 11794 USA) Quadratic Identities for Ising Model Correlations (To appear, Phys. Lett. A).
- M. Requardt (Inst. f. Theor. Physik. Universität Göttingen, 3400 Göttingen, FRG) How conclusive is the scaling argument? The connection between local and global scale variations of finite action solutions of classical E.L. equations.

- M.A. Rodriguez and M. Lorente (Dept. de Métodos Matemáticos de la Física, Facultad de Ciencias Físicas, Universidad Complutense de Madrid, Madrid-3, Spain)  
Bargmann-Wigner Equations: Symmetries of Bispinors and Equations of Motion.
- A. Ronveaux (Dept. de Physique, Fac. Universitaires N.D. de la Paix, B-5000 Namur, A. Magnus, Analyse Numérique, Université Catholique de Louvain, 2, Chemin du Cyclotron, B-1348-Louvain-la-Neuve) Surface Modes of a Spherical Void at the Proximity of a Surface.
- S.N.M. Ruijsenaars (Department of Mathematics, Texas A&M University, College Station, Texas 77843 USA) Integrable Quantum Field Theories and Bogoliubov Transformations.
- H. Spohn (Theor. Physik, Universität München, Theresienstr. 37, 8000 München 2 FRG) Fluctuations Around the Boltzmann Equation.
- H. Spohn (Theor. Physik, Universität München, Theresienstr. 37, 8000 München 2 FRG) On the Vlasov Hierarchy

Withdrawal of Membership

- 212 Hori J., Dept. Phys., Hokkaido Univ., Sapporo 060, Japan.  
299 Matthes K., Akademie der Wissenschaften der DDR, ZI Math. Mech. Mohrenstr. 39,  
DDR-108 Berlin.

New Members

- 618 Debacker-Mathot F., Univ. Catholique de Louvain, Insitut de Physique Théorique,  
Chemin du Cyclotron, 2; B-1348 Louvain-La-Neuve, Belgium.  
619 Kupiainen A., Helsinki Univ., Research Inst. for Theoretical Physics,  
Siltavuorenpenger 20C, 00170 Helsinki 17, Finland.  
620 Pearce P.A., Dept. of Theor. Phys., I.A.S., Research School of Physical Sciences,  
The Australian National Univ., Canberra A.C.T. 2600, Australia.  
621 Kalinowski M.W., Inst. of Nuclear Research, 00-681 Warsaw Hoża 69, Poland.  
622 Berezanskiĭ Ju.M., Inst. of Math., 252601 Kiev 4, Repin str., 3, USSR.  
623 Ichinose T., Dept. of Math., Hokkaido Univ., 060-Sapporo, Japan.  
624 Lahti P.J., Dept. of Physical Sciences, Univ. of Turku, SF-20500, Turku 50,  
Finland.  
625 Bănulescu M., Institute of Mathematics, Univ. of Bucharest, str. Academiei  
nr 14, Bucuresti, Romania.  
626 Schroeck F.E.Jr., Dept. of Math., College of Science, Florida Atlantic Univ.,  
Boca Raton, Florida 33432, USA.  
627 Kumar K., Dept. of Theor. Phys., Research School of Physical Sciences, The  
Australian National Univ., Box 4, P.O., Canberra, A.C.T. 2600,  
Australia (as of January 1, 1981).  
628 Bros J., Service de Physique Theorique, Div. de la Physique, C.E.N. Saclay,  
B.P.N° 2, 91190 Gif-sur-Yvette, France.

Change of Address

- 83 Chen E., ENK Research Institute, P.O. Box 855, Islington, Mass. 02090, USA.  
333 Newman Ch.M., Dept. of Math., Univ. of Arizona, Tucson, Arizona 85721, USA.  
465 Thomas L.E., Departement de Physique Theorique, Universite de Geneve,  
CH-1211, Geneve 4, Switzerland (on leave from the Univ. of  
Virginia, July 31, 1980 - June 30, 1981).  
538 Patwardhan A., 3409 Speedway #C-8, Austin, Texas 78705, USA.  
546 Ochs W., Fraunhofer-Institut INT, Appelsgarten 2, 5350 Euskirchen,  
West Germany.  
550 Ojima I., The Inst. for Advanced Study, School of Natural Science, Princeton,  
New Jersey 08540, USA.

Corrections

- 73 Carroll M.L. → O'Carroll M., Dept. de Math., Pontificia Univ. Catolica do  
Rio de Janeiro, Rua Marques de Sao Vicente,  
255-Gavea, Rio de Janeiro, CEP 22453, Brasil.  
to be listed under "O".  
95 Cornwell F.J. → Cornwell J.F.  
183 Guder S. → Gudder S.  
276 Lichnerowitz A. → Lichnerowicz A.  
347 Pavari-Fontan S. → Paveri-Fontana S.  
467 Tip, Adrian → Tip, Adriaan

## IAMP NEWS BULLETIN

### Progress Report

1. The reduced rate subscription of Communications in Mathematical Physics is going well. The announcement has been sent to IAMP members and a large number of response has been received. A Jaffe (Harvard, U.S.A.) and K. Osterwalder (ETH, Zürich) are kindly bearing the burden of collecting subscription fees.
2. D. Reidel Publishing Company joined our Association as an Associate Member.
3. The first circular about the Berlin conference will be sent out sometime in January and will be included in the next issue of this News Bulletin.

Season's Greetings to all members!

Huzihiro Araki

### Open Position

It is likely that the Harvard Physics Department will appoint a mathematical physicist to a teaching position for three to five years starting 1981-82. Please write Professor A. Jaffe at Lyman Laboratory of Physics, Cambridge, Massachusetts 02138, USA.

Harvard University is an Equal Opportunity/Affirmative Action Employer.

### Conferences (\* indicates a new item, # a correction in an old item.)

International Symposium on Foundation of Mechanics (Classical, Relativistic and Quantum), Calcutta Univ., Calcutta, India, Dec. 27, 1980 - Jan. 1, 1981.

Further information: Prof. C.K. Majumdar, Satyendranath Bose Institute of Physical Sciences, Calcutta University, 92, Acharya Prafulla Chandra Road, Calcutta-700 009, India.

(see detailed announcement in October 15, 1980 issue.)

Conference on Nonlinear Problems in Science, Rice Univ., Houston, TX, USA, Feb. 25 - 29, 1981.

Further information: John C. Polking, Dept. of Mathematics, Rice University, Box 1892, Houston, TX 77001, USA.

(see detailed announcement in October 15, 1980 issue.)

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\* News Bulletin published by the International Association of Mathematical Physics and distributed to its members.

\* All items for inclusion in this Bulletin, except possibly for preprints and books, should be sent with a clear indication that it is "for IAMP News Bulletin" to

Professor H. Araki, RIMS, Kyoto University, Kyoto 606, JAPAN.

\* Preprints and books to be announced in this Bulletin may be sent either to H. Araki at the above address or to one of the following addresses:

Mrs. Elisabeth Bähr, c/o Prof. L. Streit, Fakultät für Physik, Universität Bielefeld, 4800 Bielefeld 1, BRD

Mrs. Grace Anderson, c/o Prof. A. S. Wightman, Jadwin Hall, Princeton University, P.O.Box 708, Princeton, N.J.08544, USA.

Symposium on Ergodic Theory, von Neumann Algebras and Related Topics, Warwick University, Feb. - July, 1981 (Research meeting).  
Further information: Ms. Elaine Shiels, Mathematics Institute, University of Warwick, Coventry CV4 7AL, Great Britain.

\* 1981 Sanibel Workshop on Large Order Perturbation, the Sheraton Palm Coast Inn near Daytona Beach, Florida, USA, March 2 - 4, 1981.  
Further information: see detailed announcement on page 2.

\* "Chaotic Behaviour of Deterministic Systems", Les Houches école d'été (Session XXXVI, Nato Advanced Study Institute), Les Houches, France, June 29 - July 31, 1981.  
Further information: see detailed announcement on page 3.

Durham Symposium on Operator Algebras, Durham, England, July 27 - Aug. 6, 1981.  
Further information: B.E. Johnson, J.R. Ringrose, Dept. of Pure Mathematics, Univ. of Newcastle upon Tyne, Newcastle Upon Tyne NE1 7RU, England.

\* "Gauge Theories in High Energy Physics", Les Houches école d'été (Session XXXVII, Nato Advanced Study Institute), Les Houches, France, Aug. 3 - Sept. 11, 1981.  
Further information: see detailed announcement on page 3.

VI International Conference on Mathematical Physics, Freie Universität Berlin (West Berlin), Aug. 11 - 20, 1981.  
Further information: see the item 8 of the Progress Report in Oct. 15, 1980 issue and the item 2 in Oct. 16, 1979 issue for the organizational structure and subject matters.

International Symposium: Stochastic Processes and Applications to Differential Operators of Mathematical Physics, C.I.R.M., Marseille-Luminy, France, Aug. 24 - 28, 1981.  
Further information: René Carmona, Dept. Math., Université de Saint Etienne 23 rue P. Michelon, 42023 SAINT ETIENNE Cédex, FRANCE.

\* International Summer School "Gauge Theories Fundamental Interactions and Rigorous Results", Romania, Aug. 25 - Sept. 5, 1981.  
Further information: see detailed announcement on page 4.

#### Detailed Announcement of Conferences

1981 Sanibel Workshop on Large Order Perturbation:

J. Cizek, P.O. Lowdin and B. Simon are organizing a three-day meeting on the subjects of divergent perturbation series, summability methods and applications to atomic and molecular physics and to quantum field theory. The meeting will be March 2-4 (Arrival day March 1) at the Sheraton Palm Coast Inn near Daytona Beach, Florida. For information and registration forms, contact:

Acting Director, Sanibel Meetings  
Williamson Hall, University of Florida  
Gainesville, Florida 32611

Although it is hoped most conference participants will find full financial support from their own sources, there are a limited number of fellowships available to some of those who have requested same by December 31, 1980 (on the advance registration form).

"Chaotic Behaviour of Deterministic Systems", Les Houches école d'été (Session XXXVI, Nato Advanced Study Institute), Les Houches, France, June 29 - July 31, 1981.

Hamiltonian systems, M. BERRY, H.H. Wills Physics Lab., Bristol  
J. Moser, Math. Seminar ETH, Zurich  
Introduction to chaotic behaviour, O.E. LANFORD III, Dept. of Math.,  
Univ. of California, Berkeley  
Asymptotic behaviour of dynamical systems,  
M. HENON, Observatoire, Nice  
A. KATOK, Dept. of Math., Univ. Maryland  
M. Misiurewicz, Inst. Math. Warsaw  
Bifurcations leading to chaos, D.D. JOSEPH, Dept. of Aerospace Eng. &  
Mechanics, Univ. of Minnesota  
S. NEWHOUSE, Dept. of Math. Univ. of  
North Carolina

The program is also expected to include courses by:

Ya. G. SINAI (Landau Institute, Moscow),  
V.I. Arnold (Moscow University),  
D.V. Anosov (Steklov Institute, Leningrad).

The above courses cover in depth most of the aspects of non linear dynamics with special emphasis on the use of concepts of bifurcation and strange attractors. A careful equilibrium is kept between the theoretical aspects and applications to various fields of mechanics (celestial and fluid dynamics, turbulence), of physics (plasmas ergodicity, accelerator design), of engineering, meteorology, population dynamics, etc. A varied audience is expected, including participants of pre and post doctoral level working either on the theory or on applied problems in any field of science, from the mathematical, numerical, experimental or technical viewpoints.

A series of additional courses and seminars on special related topics will be contributed by J.P. ECKMANN, J.P. GOLLUB, A LIBCHABER, R.M. MAY, S.A. ORSZAG.

Les Houches is a village and resort of the French Alps, in the Chamonix valley, at an altitude of 1000 m. Accommodation and meals are provided within the School for both participants and lecturers, the fee of 2350 FF covering all expenses. Some possibilities for grants exist. Participants who intend to rent lodging for their family in the village should directly inquire at: Office du Tourisme, 74310 Les Houches (tel. (50)544062).

Admission forms and additional informations are available from  
Ecole d'été de Physique Théorique  
74310 Les Houches, France  
Telephone: (50)544133 and 544069

Complete files (admission forms and recommendations letters) must have reached this address before 1 March 1981.

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"Gauge Theories in High Energy Physics", Les Houches école d'été (Session XXXVII, Nato Advanced Study Institute), Les Houches, France, Aug. 3 - Sept. 11, 1981.

Introduction to gauge theories, J. WESS, Karlsruhe  
Perturbative quantum chromodynamics, C. SACHRAJDA, Southampton  
Phenomenology of unified gauge theories, J. ELLIS, CERN  
Non-perturbative quantum chromodynamics, S. COLEMAN, Harvard

$e^+e^-$  and lepton-nucleon interactions, B. WIJK, DESY  
Nucleon-nucleon interactions, L. LEDERMAN, Fermilab  
Properties of hadrons, C. QUIGG, Fermilab

The main courses listed above are concerned with the basic principles of gauge theories and their applications to high energy particle physics, as well as comparison with existing data and implications for very high energy experiments. They are mainly addressed to young theorists and experimenters working in high energy particle physics at the pre or post doctoral level but may also be of interest to astrophysicists and cosmologists. A complementary program of seminars will be devoted to connected topics ranging from the description of recent experimental results in accelerator physics, proton decay searches, and neutrino oscillations, to the recent theoretical progress in quark confinement, supergravity and unification, and the relevant aspects of astrophysics and cosmology. Seminar speakers will include G. KANE, L. SULAK, B. Zumino...

Accommodation and meals are provided within the school for both participants and lecturers, the fee of 2750 FF covering all expenses. Some possibilities for grants exist. Participants who intend to rent lodging for their family in the village should directly inquire at: Office du Tourisme, 74310 Les Houches (tel. (50)544062).

Admission forms and additional informations are available from  
Ecole d'été de Physique Théorique  
74310 Les Houches, France  
Telephone: (50)544133 and 544069

Complete files (admission forms and recommendations letters) must have reached this address before 1 March 1981.

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International Summer School "Gauge Theories Fundamental Interactions and Rigorous Results", Romania, August 25 - September 5, 1981.

Organizers: Poiana Brasov  
Romanian Academy of Sciences  
Central Institute of Physics

Directors: A Corciovei, S. Tzitzeica

Topics: A) Phenomenological Models of Gauge Fields and Fundamental Interactions  
B) The Geometric Structure of Classical Gauge Fields.  
C) Constructive Field Theory and Lattice Gauge Fields.

Address of Organizing Committee: Dr. V. Georgescu  
(Secretary of the School)  
Department of Theoretical Physics  
Central Institute of Physics  
Bucharest Magurele P.O. Box MG6  
Romania

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We have included in the above list of conferences some information which is of tentative nature. The purpose of this list is two-fold: First to inform IAMP members about future conferences for their choice and preparation. Second to inform the organizers of conferences about other conferences for a possible avoidance of conflict. Therefore we would appreciate very much being informed about any conference which some mathematical physicists might attend, even though the information might be tentative or incomplete. If the organizer agrees, we will also include conferences at a planning state.

Books

One-Parameter Semigroups, by E.B. Davies, L.M.S. Monographs No. 15, Academic Press, London, published September 1980, 230 pages.

World Scientific Publishing Company has published the following books:

1. Lectures on Differential Geometry, by Su Buchin, President, Fudan Univ.,  
Shanghai, China.  
This book is a set of notes based on lectures delivered by Prof. Su Buchin at Fudan University, Shanghai in 1978 and 1979 to graduate students and teachers from other institutions in China.  
Price: Hard cover: US\$14/-  
Soft cover: US\$ 5/-  
220 pages
2. Gauge Theory of Weak and Electromagnetic Interactions - selected papers edited by C.H. Lai  
This volume consists of 50 carefully chosen selection of the original research papers in Gauge Theory of Weak and Electromagnetic Interactions. It is an attempt to provide graduate students and mathematical physicists in this field with an easy access to the original literature which are scattered over many years and in various journals.  
Price: Hard cover: US\$28  
Soft cover: US\$16  
550 pages
3. Methods in Field Theory, edited by R. Balian & Z. Zinn-Justin  
This is a reprint edition. In this edition, in addition to all the lectures from the original edition, a review article by T.D. Lee on "Quantum Expansion of Soliton Solution" from Physics Reports is included.  
Price: Hard cover: US\$26  
Soft cover: US\$14  
440 pages

The publisher has offered to give all members of International Association of Mathematical Physics a discount of 25% on all purchases. Members who are interested please write to the following and state that you are a member of the Association.

Manager  
World Scientific Publishing Company  
Farrer Road  
P.O. Box 128  
Singapore 9128  
Republic of Singapore

Preprints

- L. Accardi (Istituto de Matematica, Universita di Milano, Italy) Markovian Cocycles.
- L. Accardi (Istituto Matematico dell'Universita, Milano, Italy), A. Frigerio & J.T. Lewis (Dublin Institute for Advanced Studies, Dublin, Ireland) Quantum Stochastic Processes.
- M. Aizenman (Dept. of Physics, Princeton University, Princeton, N.J. 08544 USA) & J. Fröhlich (IHES, Bures-sur-Yvette, F-91440 France) States of One-Dimensional Coulomb Systems as Simple Examples of  $\theta$ -vacua and Confinement (To appear, J. Stat. Phys.).



- S. Albeverio (Mathematisches Institut, Ruhr-Universität Bochum, D-4630 Bochum), M. Fukushima (College of General Education, Osaka Univ., Osaka 560, Japan). W. Karwowski (Institute for Theoretical Physics, Univ. of Wrocław, Poland) & L. Streit (Fakultät für Physik, Universität Bielefeld, 4800 Bielefeld 1, BRD) Capacity and Quantum Mechanical Tunneling.
- J. Audretsch (Fakultät für Physik, Universität Konstanz, D-7750 Konstanz) Gravitation und Quantenmechanik.
- J. Audretsch (Fakultät für Physik, Universität Konstanz, D-7750 Konstanz) Trajectories and Spin Motion of Massive Spin-1/2 Particles in Gravitational Fields.
- J. Avron (Division of Mathematics, Cal. Tech. Pasadena, California 91125 USA) and R. Seiler (Institut für Theoretische Physik, Freie Universität, Berlin, Germany) Coincident Anharmonic Oscillators.
- J.E. Avron (Division of Mathematics, Cal. Tech. Pasadena, California 91125 USA) A. Grossmann (Centre de Physique Théorique II, CNRS, Marseille, France) & R. Høegh-Krohn (Faculte des Science de Luminy and Matematisk Institut, Universitet i Oslo, Norway) Exact Formulas for Coherent Nuclear Bragg Scattering.
- J.E. Avron and B. Simon (Division of Mathematics, Cal. Tech. Pasadena, California 91125 USA) The Asymptotics of the Gap in the Mathieu Equation.
- J. Beckers and M. Jaspers (Physique Théorique et Mathématique, Université de Liège, B-4000 Liège) On Spin Algebras and Triads Associated with the Infinite-Momentum Frame.
- J. Beckers and V. Hussin (Physique Théorique et Mathématique, Université de Liège, B-4000 Liège) Spinors and Related Tensors Invariant under  $E(3)$  and its subgroups.
- R. Beig (Inst. für Theor. Physik, Universität Wien, A-1090 Wien) On Scattering of Scalar Waves in Static Space-Times, Particularly Schwarzschild.
- J.S.R. Chisholm and R.S. Farwell (Mathematical Institute, University of Kent, Kent, England) Spin Gauge Field Theory of Electric and Magnetic Spinors.
- E.B. Davies (Mathematical Institute, Oxford, England) and Ph.A. Martin (Laboratoire de Physique Théorique, Ecole Polytechnique Fédérale de Lausanne, CH-1006 Lausanne) Metastable States of Some Ferromagnetic Lattice Systems.
- E.B. Davies (St. John's College, Oxford OX1 3JP, England) Non-Linear Functionals in Quantum Mechanics.
- E.B. Davies (St. John's College, Oxford OX1 3JP, England) Symmetry Breaking for Molecular Open Systems.
- M. Demuth (Adademie der Wissenschaften der DDR, Zentralinstitut für Mathematik und Mechanik, DDR 108 Berlin, Mohrenstr. 39) On Time-Dependent Scattering Theory in Krein Spaces.

- G.G. Emch (Depts. of Mathematics and Physics, University of Rochester, Rochester, N.Y. 14627 USA) Prequantization and KMS Structures.
- V. Enss (Inst. für Mathematik, Ruhr-Universität, D-4630 Bochum) Geometric Methods in Spectral and Scattering Theory of Schroedinger Operators.
- V. Enss (Inst. für Mathematik, Ruhr-Universität, D-4630 Bochum) & B. Simon (Dept. of Mathematics and Physics, Princeton University, Princeton, NJ 08544 USA) Total Cross Sections in Non-Relativistic Scattering Theory.
- P. Exner and G.I. Kolerov (Joint Inst. for Nuclear Research, Dubna, USSR) Feynman Maps without Improper Integrals.
- A.P. Fordy and J. Gibbons (School of Theor. Physics, Dublin Inst. for Advanced Studies, Dublin 4, Ireland) Factorisation of Operators II.
- A. Frigerio and J.T. Lewis (Dublin Institute for Advanced Studies, Dublin 4, Ireland) Non-Commutative Gaussian Processes.
- A. Frigerio (Dublin Inst. for Advanced Studies, Dublin 4, Ireland) Quantum Stochastic Processes II.
- J. Fröhlich, H. Kriesche and L. Streit (Institut für Theoretische Physik der Universität Graz, A-8010 Graz) Prediction of  $n$ - $\alpha$  Phase Shifts and Inelasticities from  $p$ - $\alpha$  Data between 20 and 55 MeV.
- M. Fukushima (College of General Education, Osaka University, Toyonaka 560, Japan) On a Representation of Local Martingale Additive Functionals of Symmetric Diffusions.
- J.P. Gazeau (Centre de recherche de mathématiques appliquées, Université de Montreal, Montreal H3C 3J7, Canada) and M. Perroud (Département de mathématiques appliquées, Ecole Polytechnique, Montréal H3C 3A7, Canada) Magnetic Moment of a Galilean Particle with Arbitrary Spin.
- H.-O. Georgii (Fakultät für Mathematik, Abt. 1, Universität Bielefeld, 4800 Bielefeld 1, BRD) Percolation for Low Energy Clusters and Discrete Symmetry Breaking in Classical Spin Systems.
- L.P. Horwitz (Syracuse Univ., Syracuse, New York 13210, USA) On Relativistic Quantum Theory.
- L.P. Horwitz (Syracuse Univ., Syracuse, New York 13210, USA) and F.C. Rotbart (Tel. Aviv Univ., Ramat Aviv, Israel) On the Non-relativistic Limit of Relativistic.
- P. Houston and L. O'Raiifeartaigh (Dublin Institute for Advanced Studies, Dublin 4, Ireland) On the Charge Distribution of Static Axial and Mirror Symmetric Monopole Systems.
- P. Houston and L. O'Raiifeartaigh (Dublin Institute for Advanced Studies, Dublin 4, Ireland) On the Zeros of the Higgs Field for Axially Symmetric Multi-Monopole Configurations.

- M.W. Kalinowski and M. Grundland (Inst. of Theoretical Physics, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) An Exact Solution of the Korteweg-De Vries Equation with Dissipation.
- M.W. Kalinowski (Institute of Theoretical Physics, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) Nonlinear Waves Interaction and a Program of Quantization of Nonlinear Theories.
- M.W. Kalinowski and M. Seweryński (Inst. of Theoretical Physics, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) On Hermite-Bell Polynomials.
- M.W. Kalinowski (Inst. of Theoretical Physics, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) and L. Szymanowski (Inst. of Nuclear Research, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) On Some Generalizations of Gaussian Integral and the Dimensional Regularization.
- M.W. Kalinowski and M. Grundland (Inst. of Theoretical Physics, Warsaw Univ., 00-681 Warsaw, Hoza 69, Poland) Simple Waves for Equation of Potential Non-Stationary Flow of Compressible Gas.
- J.T. Lewis (School of Theor. Physics, Dublin Inst. for Advanced Studies, Dublin 4, Ireland) The Heterogeneous String: Coupled Helices in Hilbert Space.
- J.T. Lewis (Dublin Inst. for Advanced Studies, Dublin 4, Ireland) Quantum Stochastic Processes I.
- E.H. Lieb and A.D. Sokal (Depts. of Physics and Mathematics, Princeton University, Princeton, N.J. 08544 USA) A General Lee-Yang Theorem for One-Component and Multicomponent Ferrromagnets.
- E.H. Lieb and A.D. Sokal (Depts. of Physics and Mathematics, Princeton University, Princeton, N.J. 08544 USA) Zeros of Derivatives of Polynomials in Several Complex Variables.
- K. McFarlane (School of Theor. Physics, Dublin Inst. for Advanced Studies, Dublin 4, Ireland) and K.-K Wan (Department of Theor. Physics, University of St. Andrews, St. Andrews, Scotland) On Certain Local Observables Generated by the Momenta.
- K. McFarlane (School of Theor. Physics, Dublin Inst. for Advanced Studies, Dublin 4, Ireland) and K.-K Wan (Department of Theor. Physics, University of St. Andrews, St. Andrews, Scotland) On the Quantization and Meaning of the Observables Linear in Momentum.
- J. Mickelsson (Research Inst. for Theor. Physics, University of Helsinki, SF-00170 Helsinki) On Non-Compact Gauge Transformations and Gauge Fixing.
- P.A. Perry (Dept. of Physics, Princeton University, Princeton, N.J. 08544 USA) Propagation of States in Dilation Analytic Potentials and Asymptotic Completeness.
- J.V. Pulè (Department of Mathematical Physics, University College, Belfield, Dublin, Ireland and School of Theoretical Physics, Dublin Institute for Advanced Studies, Dublin) Positive Maps of the CCR Algebra with a Finite Number of Non-Zero Truncated Functions.

- A. Rieckers (Institut für Theor. Physik, Universität Tübingen, D-7400 Tübingen)  
Effective Dynamics of the Quantum Mechanical Weiß-Ising Model.
- K. Schmüdgen (Sektion Mathematik und NTZ, Karl-Marx-Universität, Leipzig,  
GDR) Perturbations of Selfadjoint Operators with Point Spectra by  
Restrictions and Selfadjoint Extensions.
- B. Simon (Dept. of Mathematics, California Institute of Technology, Pasadena,  
CA 91125 USA, on leave from Princeton Univ.) Convergence in Trace  
Ideals.
- B. Simon (Dept. of Mathematics, California Institute of Technology, Pasadena,  
CA 91125 USA, on leave from Princeton Univ.) and A.D. Sokal (Dept.  
of Physics, Princeton University, Princeton, NJ 08544, USA) Rigorous  
Entropy-Energy Arguments.
- B. Simon (Dept. of Mathematics, California Institute of Technology, Pasadena,  
CA 91125 USA, on leave from Princeton Univ.) Spectrum and Continuum  
Eigenfunctions of Schrödinger Operators.
- B. Simon (Dept. of Mathematics, California Institute of Technology, Pasadena,  
CA 91125 USA, on leave from Princeton Univ.) The Rate of Falloff  
of Ising Model Correlations at Large Temperature.
- J. Slawny (Lab. for Transport Theory and Mathematical Physics, Virginia Polytechnic  
Inst., Blacksburg, Virginia 24061 USA) Ergodic Properties of Equilibrium  
States.
- A.I. Solomon (The Open University, Milton Keynes MK7 6AA, U.K.) Phases and  
Conjugacy Classes.
- R.F. Streater (Dept. of Math., Bedford College, London NW1 4NS, England)  
Dynamical Selection Rules.
- R.F. Streater (Dept. of Math., Bedford College, London NW1 4NS, England)  
Euclidean Quantum Mechanics and Stochastic Integrals.
- L. Streit (Fakultät für Physik, Universität Bielefeld, 4800 Bielefeld 1, BRD)  
Energy Forms: Schroedinger Theory, Processes.
- J.L. Synge (School of Theor. Physics, Dublin Institute for Advanced Studies,  
Dublin 4, Ireland) On the Vibrations of a Heterogeneous String.
- M.K.F. Wong (Fairfield University, Fairfield, CT 06430 USA) and H.Y. Yeh  
(Moorhead State University, Moorhead, Minn. 56560 USA) A Unified  
Treatment of the Representation Functions of  $SO(n,1)$ ,  $SO(n+1)$ , and  
 $ISO(n)$ .
- M.K.F. Wong (Fairfield University, Fairfield, CT. 06430 USA) and H.Y. Yeh  
(Moorhead State University, Moorhead, Minn. 56560 USA) Explicit  
Evaluation of the Representation Functions of  $IU(n)$ .

New Members

- 629 Donald M.J., Rockefeller University, 1230 York Avenue, New York, NY 10021, USA.
- 630 Simmons L.M., Theoretical Division, MS-210 Los Alamos Scientific Laboratory, Los Alamos, N.M. 87545, USA.
- 631 Raychowdhury P.N., Dept. of Mathematical Sciences, Virginia Commonwealth University, Oliver Hall 2055, Richmond, VA 23284, USA.
- 632 Rajaraman R., Center for Theoretical Studies, Indian Inst. of Science, Bangalore 560012, Karnataka, India.
- 633 Sölter G.-U., Lehrstuhl für Theoretische Physik B. Technische Universität 33 Braunschweig, Deutschland.
- 634 Symanzik K., Deutsches Elektronen-Synchrotron DESY, Notkestr. 85, D-2000 Hamburg 52, Fed. Rep. Germany (as of January 1, 1981).

Change of Address

- 76 Castrigiano D.P.L., Inst. für Mathematik der Technischen Universität München, D-8000 München 2, Arcisstrasse 21, FGR.
- 236 Jonsson Th., Raunvisindastofnun, Haskolans, 107 Reykjavik, Iceland.
- 252 Kay B.S., Institut für Theoretische Physik, Universität Bern, 3012 Bern, den Sidlerstrasse 5, FGR.
- 438 Summers St., Fachbereich 5, Universität Osnabrück, Postfach 4469, D-4500 Osnabrück, FGR.
- 492 Vinet L., Center for Theoretical Physics, Laboratory for Nuclear Sciences and Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02139, USA.
- 513 Wreszinski W.F., Universidade de São Paulo, Instituto de Física, Cidade Universitaria, Caixa Postal 20516, São Paulo, Brasil.
- 536 Hietarinta J., Dept. of Physical Sciences, Univ. of Turku, SF-20500 Turku 50, Finland.
- 574 Trucano T., Division 5531, Sandia National Laboratories, Albuquerque, NM 87185, USA.

Corrections

- 8 Alcantara J., Fac. Math., The Open Univ., Walton Hall, Milton Keynes, MK7 6AA, England.
- 10 Amrein W., Dépt. de Physique Théorique, CH-1211 Geneve 4, Switzerland.
- 535 Alcantara J. to be deleted because of duplication. (Correct membership number is 8.)
- 565 Suhov Yu.M., Institute for Information Transmission Problems, USSR Academy of Sciences, 19, Yermolova str. Moscow, 101447, USSR.