

January 12, 1979

AMP NEWS BULLETIN

Progress Report

1. H. Araki has been elected as President of AMP starting January 1979.
2. Preprints to be announced should be sent to one of the following addresses:
Prof. Huzihiro Araki, Research Institute for Mathematical Sciences, Kyoto University,
Kitashirakawa-Oiwakecho, Sakyo-ku, Kyoto 606, JAPAN
Prof. L. Streit, Fakultät für Physik, Universität Bielefeld, D-48 Bielefeld, BRD
Prof. A.S. Wightman, Department of Physics, Jadwin Hall, Princeton University,
Princeton, N.J. 08540, USA.
Please write "For AMP News Bulletin" on preprints for the sake of distinction from
personal copies.
3. All other information to be placed on the AMP News Bulletin, such as conference
information, position opening, etc. should be sent to H. Araki.

Since this is the last bulletin issued from me I would like to take the opportunity to
thank all people who have helped me with their effort to make AMP a useful undertaking.
Having done my job as a midwife, I remain with best wishes,

W. Thirring

Conferences

- Operator Algebras in Mathematical Physics, University of Rochester, May 21 - 25, 1979**
Further information: G.G. Emich, Depts. of Mathematics and Physics, University of Rochester,
Rochester, N.Y. 14627, USA.
- Random Fields: Rigorous Results in Statistical Mechanics and Quantum Field Theory,
Esztergom, June 24 - 30, 1979**
Further information: Prof. A. Vetier, Mathematical Institute, H-1053 Budapest V,
Realtanoda u. 13-15, Hungary
- Mathematical Physics: Trabzon, July 23 - Aug. 4, 1979, Bebek, Istanbul, Aug. 6 - 10, 1979**
Further information: A O. Barut, Physics Department, University of Colorado, Boulder,
Co. 86309, USA.
- Feldtheoretische Methoden der Elementarteilchenphysik, Kaiserslautern, Aug. 13 - 24, 1979**
Further information: Prof. W. Rühl, Universität Kaiserslautern, D-6750 Kaiserslautern,
Pfaffenbergstraße 46/551.
- AMP-Conference, Lausanne, Aug. 20 - 25, 1979**
Further information: Ph. Choquard, Dept. of Physics, EPF Lausanne, CH-1001 Lausanne,
14, av. de l'Eglise-Anglaise.
- Fundamental Problems of Theoretical and Mathematical Physics, Dubna, Aug. 23 - 27, 1979**
Further information: Dr. S.P. Kuleshev, JINR, Head Post Office, P.O.Box 79,
101000 Moscow, USSR.
- Quantum Dynamics of Molecules: The New Experimental Challenge to Theorists, Cambridge,
England, Sept. 15 - 29, 1979**
Further information: R.G. Woolley, Cavendish Laboratory, Cambridge, England.
- Nonlinear Dynamics, New York Academy of Sciences, fall 1979 (Nov. 6 - 10?)**
Further information: R.H.G. Helleman, School of Physics, Georgia Tech Atlanta, Georgia 30332.

Open Position

Post-doctoral position (faculty position), open for Aug. 1979 at the Department of Physics,
Indiana University. Curriculum vitae and three letters of reference should be sent to
R.G. Newton, Chairman, Dept. of Physics, Indiana University, Bloomington, Indiana 47405.

Book

- W. Thirring, A Course in Mathematical Physics I, Classical Dynamical Systems, Springer New York, European members can get it at a reduced price of DM 36.- (instead of DM 44.-) by ordering it at: H. Narnhofer, Institut für Theoretische Physik, Boltzmannngasse 5, A-1090 Wien, Austria.

Preprints

- M. Satō, T. Miwa, M. Jimbo, Kyoto University, Holonomic Quantum Fields III, IV.
 Y. Ne'eman, Tel-Aviv University, Quarks and the Structure of Hadrons and Leptons.
 B. Klima, U. Maor, Tel-Aviv University, Quark-Line Rule and its Violation in Production Processes.
 J. Kupisch, W. Rühl, Univ. Kaiserslautern, On the Quantization of Hydrodynamics.
 F. Langouche, D. Rockaerts, E. Tirapegni, K.U. Leuven, Short Derivation of Feynman Lagrangian for General Diffusion Processes.
 U. Cattaneo, Neuchatel, Borel Multipliers for the Bondi-Metzner-Sachs Group.
 C. DeWitt-Morette, A. Maheshwari, B. Nelson, ICTP, Trieste, Path Integration in Non-Relativistic Quantum Mechanics.
 H. Narnhofer, G.L. Sewell, Queen Mary College, London, Equilibrium States of Gravitating Systems.
 R. Lavine, Rochester, Spectral Density and Sojourn Times.
 J. Avron, R. Seiler, FU Berlin, Paramagnetism for Non-Relativistic Electron and Euclidian Massless Dirac Particles.
 K. Chadan, Orsay, Gel'fand Levitan Theory of the Inverse Problem for Singular Potentials.
 M. Omote, S. Kamefuchi, MPI für Physik und Astrophysik, München, Paragrassmann Algebras and Parafermi Systems.
 B. Schroer, T.T. Truong, FU Berlin, The Order/Disorder Quantum Field Operators Associated to the Two-Dimensional Ising Model in the Continuum Limit.
 Z. Haba, Bielefeld, Remarks on the Stochastic Process Corresponding to $(1/\varphi^2)_1$ Interaction.
 H.J. Rothe, J.A. Swieca, PUC, Rio de Janeiro, Quantization Ambiguity and Non-Trivial Vacuum Structure.
 T.A. Osborn, D. Bolle, Univ. Leuven, Integral Bounds for N-Body Total Cross Section.
 R.T. Glassey, W.A. Strauss, Bloomington, Indiana University, Decay of a Yang-Mills Field Coupled to a Scalar Field.
 O. Penrose, Open University, An H Theorem for K-Systems.
 L. Benassi, V. Grecchi, E. Harrell, B. Simon, Princeton, The Bender-Wu Formula and the Stark-Effect in Hydrogen.
 T.P. Beven, R. Delbourgo, Hobart, Tasmania, Australia, Renormalization Constants in the Axial Gauge.
 P.M. Alberti, Leipzig, A Characterization of the Extreme Points of Certain Convex Sets of Stochastic Matrices.
-
- G. Hofmann, Leipzig, Rigorous Existence Proof for Quantum Fields I, Existence of Non Generalized Free Fields.
 J. Audretsch, Konstanz, Cosmological Particle Creation as Above-Barrier Reflection: Approximation Method and Applications.
 O.J. Heilmann, E.H. Lieb, Dept. of Chemistry, Copenhagen, Lattice Models for Liquid Crystals.
 S.M. Moore, Univ. de Los Andes, Bogota, Colombia, Foundations of Stochastic Physics II. Low Energy Phenomena at Positive Temperature.
 S. Alberverio, R. Hoegh-Krohn, Bielefeld, The Exponential Interaction in R^n . The Markov Property for Euclidian Fields. The Case of Trigonometric Interactions.
 C.O. Nwachuku, ICTP Trieste, New Expression of the Eigenvalues of the Invariant Operators of $O(N)$ and $Sp(2n)$.
 G. Paiano, S.L. Paveri Fontana, Univ. di Bari, Italy, An Exact Method for the Evaluation of the S-Matrix for the Yukawa Potential Problem.
 F. Langouche, D. Roekaerts, E. Tirapegni, Univ. Leuven, On the Perturbation Expansion for Focker-Planck Dynamics.
 W.D. Garber, Princeton University, All Spontaneous Broken Symmetries for Non-Covariant Currents.

- W.D. Garber, H. Reeh, Göttingen, On the Structure of Symmetry Generators.
- J. Reignier, Brussels, Remark on the Inverse Scattering Problem at Fixed Energy.
- S. Samuel, LBL, Univ. of California, The Use of Anticommuting Integrals in Statistical Mechanics I, II.
- A.I. Burgrij, A.A. Trushevsky, Kiev, The Van der Waals Equation for the System of Ultra-relativistic Particles (in Russian).
- H. Brezis, E.H. Lieb, Univ. Paris VI, Long Range Atomic Potentials in Thomas Fermi Theory.
- F. Debacher-Mathot, Louvain-la-Neuve, Integral Decomposition of Unbounded Operator Families.
- H. Grosse, H. Narnhofer, W. Thirring, CERN, Accurate Determination of the Scattering Length for the Scattering of e^- on μ^-p Atoms.
- E.B. Davies, Oxford, Scattering Theory from a Spatially Restricted Atom I, Symmetry Breaking for a Non-linear Schrödinger Equation, Two Channel Hamiltonians and the Optical Model of Nuclear Scattering.
- B.G. Englert, J. Karkowski, J.M. Rayski Jr., Cracow, Conditions on Classical Sources for a Quantum Scalar Field with Higher Order Derivatives
- C.S. Gardner, C. Radin, Univ. of Texas at Austin, The Infinite Volume Ground State of the Lennard-Jones Potential.
- A. Adamczyk, R. Raczka, ICTP Trieste, New Relativistic Wave Equations Associated with Indecomposable Representations of the Poincare Group.
- A.I. Ompko, Kiev, The Theory of the Excitation Spectrum of Systems with Non-diagonal Disorder in the Average T-Matrix Approximation, The Partially Summed Green's Function Series Method in the Theory of Systems with a Non-diagonal Disorder.
- O.K. Vidybida, Kiev, The Cauchy Problem for the Kinetic Bogoliubov Equations, One-dimensional Quantum Lattice Systems.
- M.Yu. Rasulova, Kiev, On Perturbation of Equilibrium Solutions of the Bogoliubov Quantum Kinetic Equations (in Russian).
- P.I. Holod, Kiev, Pseudopotentials and Backlund Transformation for Thirring Equation (in Russian).
- I.A. Vakarchuk, O.L. Honopolsky, Kiev, The Ground State of One-dimensional System of Hard Kernels (in Russian)
- M. Romerio, W. Wreszinski, Neuchatel, On the Lifschitz Singularity and the Tailing in the Density of States for Random Lattice Systems.
- F. Gallone, A. Sparzani, Princeton University, Segal Quantization of Dynamical Systems.
- J.R. Klauder, Bell Laboratories, Murray Hill, New Measures for Nonrenormalizable Quantum Field Theory Bosons without Bosons, Scale Covariant Quantum Field Theory.
- Ch. Gruber, Ch. Lugin, Ph.A. Martin, Lausanne EPF, Equilibrium Equations for Classical Systems with Long Range Forces, and Application to the One-dimensional Coulomb Gas.
- R.S. Ellis, C.M. Newman, Bloomington, Indiana, Extension of the Maximum Principle: Exponential Preservation of the Heat Equation.
- R.S. Ellis, C.M. Newman, J.S. Rosen, Bloomington, Indiana, Limit Theorems for Sums of Dependent Random Variables Occurring in Statistical Mechanics II: Conditions, Multiple Phases and Metastability.
- J. Ginibre, G. Velo, Orsay, The Classical Field Limit of Scattering Theory for Non-Relativistic Many-Boson Systems.
- A. Arneodo, P. Couillet, C. Tresser, Univ. de Nice, A Renormalization Group with Periodic Behaviour.
- B. Jancewicz, Wroclaw, Electromagnetism with a Use of Bivectors.
- G. Sobczyk, Wroclaw, Spacetime Algebra Approach to Curvature.
- A.Z. Jadczyk, Wroclaw, Some Comments on Conformal Connections.
- P. Garbaczewski, Wroclaw, Φ_1^4 as Almost Spin 1/2 Systems.
- J. Jakubczak, Z. Mrozinska, A. Pekalski, Wroclaw, Critical Temperature of Mixed Ferro- and Antiferromagnetic Ising Systems with Arbitrary Spin.

- J. Hladyszowski, Wroclaw, 2-Dimensional Conformal-Invariant Fields and the Representations of the Lorentz Group.
- J. Hanckowiak, Wroclaw, A Space-Time Functional Formalism for Classical Field Equations, Investigations of Equations of Quantum and Statistical Physics in Subspace I, Schwinger Equations
- J.E. Avron, CNRS, Marseille, On the Spectrum of $p^2 + v(x) + \epsilon x$, v Periodic and ϵ Complex.

New Members

- F. Debacker-Mathot, Universite Catholique de Louvain, Institut de Physique Theorique, Chemin du Cyclotron, 2, B-1348 Louvain-la-Neuve, Belgique
- H. Brezis, Departement de Mathematiques, Universite Paris VI, 4, pl. Jussieu, F-75230 Paris Cedex 05
- L.S. Schulman, Physics Dept., Technion, Haifa, Israel
- P. Pfeifer, ETH Zürich, Laboratorium für Physikalische Chemie, Universitätsstraße 22, CH-8092 Zürich, Schweiz
- G.A. Raggio, ETH Zürich, Laboratorium für Physikalische Chemie, Universitätsstraße 22, CH-8092 Zürich, Schweiz
- R. Carmona, Departement de Mathematiques, Universite de Saint-Etienne, 23, rue du Docteur Paul Michelon, F-42100 Saint-Etienne, France
- T. Dereli, Physics Department, Middle East Technical University, Ankara, Turkey
- G. Gallavotti, Istituto di Fisica "G. Marconi", Piazzale della Scienze 5, I-00185 Roma, Italia
- D.B. Pearson, Department of Applied Mathematics, University of Hull, Cottingham Road, Hull, England
- W.O. Amrein, Ecole de Physique, CH-1211 Geneve 4, Suisse
- Y. Kato, Department of Engineering Mathematics, Faculty of Engineering, Utsunomiya Univ., Utsunomiya, 321-31, Japan
- K. Sekine, Department of Physics, Meisei University, Tokyo 191, Japan
- Keiichi R. Ito, Research Institute for Mathematical Sciences, Kyoto University, Kyoto 606, Japan
- F. Hansen, Research Institute for Mathematical Sciences, Kyoto University, Kyoto 606, Japan
- Izumi Ojima, Research Institute for Mathematical Sciences, Kyoto Univ., Kyoto 606, Japan
- B.Y.L. Ek, Research Institute for Mathematical Sciences, Kyoto Univ., Kyoto 606, Japan
- M. Sirugue-Collin, C.N.R.S.-Luminy, Case 907. Centre de Physique Theorique, F-13288 Marseille Cedex 2, France
- R. Ahlrichs, Institut für Physikalische Chemie und Elektrochemie (Theoretische Chemie) der Universität Karlsruhe, Kaiserstraße 12, D-75 Karlsruhe

Changes of Address

- W.F. Wreszinski, Inst. de Fisica USP, Dep. Fis. Matematica, Caixa Postal 20516, 01000 Sao Paulo, Brasilien
- S.L. Payeri-Fontana, Dept. of Engineering Science, State University of New York at Buffalo, Buffalo, NY 14214, USA
- P. Exner, Laboratory of Theoretical Physics, JINR, 141980 Dubna, USSR
- J.E. Avron, Department of Physics, Technion, Israel Institute of Technology, Technion City, Haifa, Israel.

IAMP NEWS BULLETIN

Progress Report

1. The amount of membership dues for an Ordinary Member is fixed by the Executive Committee at ten U.S. dollars (\$ 10.-) per year starting from the year 1980. According to Article 21 of the By-Laws, the membership dues for each fiscal year is payable by the end of the preceding fiscal year. This means that you are expected to pay the dues for 1980 by the end of this year.

Please note the following points about dues :

(a) We encourage members to pay 3 years dues at a time, which cuts down frequency of handling for both sides.

(b) Since our Treasurer is in Geneva, we have been using the following Swiss account :

Crédit Suisse, Geneva
No. 0251.238.577

We have fixed the amount of annual membership dues, which are paid to this Swiss account, to be 17 Swiss Francs, independent of the exchange rate at the time of the payment. Members will generally receive an invoice from Treasurer payable to this Swiss account.

(c) To facilitate the payment of membership dues in different currencies, we are now setting up additional Bank accounts in several places, which I hope to be operative by the time that this News Bulletin is distributed. They include U.S.A. (American dollars), France (French Francs), West Germany (Deutsche Marks), Japan (Japanese Yen) and possibly Poland. The information about these accounts, as well as the methods of payment and the amount of annual dues in respective currencies, is to be enclosed with this News Bulletin by each Bulletin distribution center (by Princeton about American Account, by Bielefeld about European accounts and by Kyoto about Japanese account for residents in Japan).

(d) Those members who have difficulties in paying dues should apply for "reduced dues status" (the amount of the reduced dues being zero) to the President, stating the reason.

(e) According to the Article 21 of the Statutes, the voting rights are reserved for Ordinary Members who paid up annual dues. According to the Article 11 (c) of the Statutes, the membership is terminated after non-payment of the membership dues for one year (unless the Executive Committee waives the elimination of membership using Article 12 of the Statutes). Thus we ask all members to pay membership dues, which are necessary for smooth functioning of our Association.

* 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, D-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.

2. The next congress of our Association will be held as follows :

Name : Vith International Conference on Mathematical Physics.

Place: Freie Universität Berlin (West Berlin).

Date : August 11 (Tuesday) - August 21 (Friday), 1981
or a subset of this interval. (Due to an overlap with a big event i
Berlin, the date has been shifted 2 weeks from an earlier decision.)

The Conference is open for anyone interested in attending (member or non-member). Essentials for the organization of the Conference have been decided by the Executive Committee in consultation with local organizers. The actual planning will henceforth be carried on by 3 Committees : The Organizing Committee consisting of local people will handle all non-scientific matters of the Conference. The Conference Committee, consisting of H. Araki (Kyoto), J. Ehlers (München), L. Faddeev (Leningrad), E. Lieb (Princeton), R. Schrader (Berlin), R. Seiler (Berlin) and D. Uhlenbrock (Berlin) with Araki as Chairman and Seiler as Executive Secretary, will make decisions on scientific matters of the Conference. The Advisory Committee, now being appointed by the President, will be consulted on important scientific matters of the Conference. The following list of key-words might convey the spirit of the Conference :

Statistical Mechanics, Quantum Field Theory, Gravitation,
Gauge Theory, Non-Linear Systems, Dynamical Systems,
Turbulence and Chaos, Critical Phenomena, Foundations of
Quantum Mechanics, Non-Relativistic Quantum Mechanics,
 C^* -Algebra Approach, Group Theory, Probabilistic Methods,
Geometrical and Deformation Approach.

I hope that members will spread words about this conference, make early preparation if interested in attending and send opinions about the Conference, if any, to R. Seiler.

3

3. Proposals for the 1983 IAMP Conference should be sent to the President by February 1, 1980. The Executive Committee considers the following as desirable, though they are not necessarily absolute requirements.

(1) The site is in North America in view of sites previous to the 1983 Conference (Moscow 1972, Warsaw 1974, Kyoto 1975, Rome 1977, Lausanne 1979, West Berlin 1981) and a large population of mathematical physicists in North America.

(2) The funding is similar to previous conferences.

(3) Some inexpensive accommodations such as dormitories are available for some participants.

(4) A lecture hall accommodating 400 or more, another lecture hall accommodating 200 or more (for a possibility of parallel sessions) and a few smaller rooms or offices.

The proposal should indicate how the above conditions are (or will be) met (in terms of some concrete plans, if possible). It also should be accompanied by a concise description of possible merits (and demerits) of the proposal, which can be shown to all members of the Association in case of a popular vote.

As for the time of the Conference (within the year 1983), it looks like that more or less immediately before the American Labor Day week-end seems to be the most convenient time for people from different countries. However a different time of the year may be proposed preferably with some explanation for the choice.

4. A meeting of the General Assembly was held in Lausanne on August 22, 1979 with its agenda as announced earlier. The following is the minutes of the meeting as drafted by the Secretary (Hunziker) in accordance with the Article 36 (d) of the Statutes.

IAMP General Assembly of August 22, 1979, in Lausanne

1. Progress report by the President

H. Araki reported on the previous meetings of the new executive committee and on the pending applications to UNESCO (recognition of IAMP as a scientific non-Governmental organization) and to IUPAP (formation of a committee on mathematical

physics). The president invites all members and in particular the planners of conferences to supply information on meetings which will attract mathematical physicists (for publication in the bulletin).

2. Discussion on the question of membership dues.

After recalling article 20 of the by-laws ("The amount of membership dues is fixed by the executive committee") H. Araki submitted the following proposals for discussion :

- Membership dues should be 10 U.S. dollars a year, beginning with the year 1980.
- Payment should be made to accounts set up in France, Germany, Japan, the Soviet Union and the United States in addition to the one already existing in Switzerland.
- A reduced rate status (zero dues) should be accorded to members which are unable to pay dues for specific reasons (such as currency restrictions or lack of income).
- It should be possible to pay dues for 3 years in advance.

The discussion centered on the following aspects :

Necessity of dues : The expenses for the publication and the distribution of the bulletin cannot be covered indefinitely by the few institutions actually performing this task. Also, fund-raising for conferences is difficult if the association itself does not contribute financially (if only on a modest scale). As a welcome side-effect, the collection of dues would make renewal of membership automatic.

Amount of dues : A certain reluctance was felt against collecting money for unspecified purposes. Some members argued for lower dues (like 10 dollars every 2 years) or for due-free years in case of a surplus over the cost of the bulletin. There was also a voice against dues, favouring voluntary contributions.

Collection of dues. The following suggestions were made : bi-annual collection (possibly together with conference registration); collection by the bulletin distribution centers (to cover first their own expenses); purchase of life-membership for 10 times the annual amount of dues; establishing an account in Poland for the Eastern European countries.

Taking these opinions into account the executive committee will make its decision in the next meeting.

3. Other business and general discussion

1981 conference

H. Araki reported on the preparations for the next Conference on Mathematical

Physics, which will be held within the period from August 25 to September 4, 1981 at the FU Berlin.

Ph. Choquard described some of the problems met by the organizers of the Lausanne conference (compromise between "conference on mathematical physics" and "congress of the IAMP", disappointing first response from part of the advisory committee). He estimates that planners of a similar conference should be prepared to raise funds of the order of 50.000 dollars. In this connection he strongly urges IAMP to contribute to the financing of its conferences.

The discussion focused on the following points :

Subjects represented at the conference : Some subjects not represented at the Lausanne conference (such as General Relativity and Group Theory) should be included. This would call for a longer duration of the next conference and/or parallel sessions. As an alternative it was suggested to keep the present format of the conference but to emphasize other subjects.

Parallel sessions : Several members expressed their satisfaction with the Lausanne program which avoided parallel sessions (applause). On the other hand some cogent reasons were given in favour of parallel sessions :

- By trying to cover all subjects in plenary sessions the schedule becomes too crowded. There is no time to present the new developments in each field in sufficient detail and not enough time for discussions.
- All subjects are not equally attractive for all participants. A certain number of options should be open to accommodate individual tastes and to facilitate communication among specialists in various fields.
- It is desirable that more people are given an opportunity to present their work (Speakers have a better chance to obtain travel support).

As a compromise it was suggested to have a small number of parallel sessions with subsequent feed-back to the plenum (e.g. in the form of rapporteur talks). In any case, the conference should not be allowed to split into disconnected sub-conferences, and all major themes of mathematical physics should be well represented in plenary sessions.

General discussion

Some concern was expressed regarding unrestricted access to future conferences. So far there is no indication that this problem will arise.

Several members advocated a ballot to choose the site for the 1983 conference, leaving a certain amount of leeway for the decision by the executive committee.

Bulletin : In connection with President's report about a proposal from a member that addresses be omitted from preprint list in the News Bulletin and substituted by a distribution of a membership list with addresses once a year, it is strongly desired that preprints are listed with addresses (including home address where necessary).

The secretary

W. Hunziker

5. Two meetings of the Executive Committee were held in Lausanne on August 21 and 24, 1979 with the following agenda :

- Organization of 1981 IAMP Conference.
- Method of deciding the site for the 1983 IAMP Conference.
- The August 22 meeting of the General Assembly.
- Election of the members of the Executive Committee for 1982-84.
- Increased participation of Russians.
- Membership dues and budget.

6. Two additional words about the preprint list in this Bulletin.

a. In the last issue, I mentioned about putting the name of the journal where the paper is to appear or submitted. This is, of course, only if the paper has been already submitted. I have no intention of requiring this as a necessary condition for the preprint to be listed here.

b. It has been suggested to print the address of IAMP members once a year and people use that list so that the addresses can be omitted in the preprint list. This idea proved to be very unpopular at the August 22 meeting of the General Assembly and hence will not be adopted.

7. A membership list is enclosed with this Bulletin. Due to a technical reason (we do not have our own secretaries), it was not possible to include all new members in this list. There will be an additional list with the next News Bulletin. After that, new members will be announced in the news bulletin as they join our Association.

8. The membership number is indicated in front of each name in the membership list.

Open Position

The Bielefeld University Physics Department expects to have an opening in mathematical physics on the associate professor level for 18 months beginning in the fall of 1980. Enquiries and applications should be addressed to: L. Streit, University of Bielefeld, Faculty of Physics, Universitätsstr. 1, 4800 Bielefeld 1/Germany.

Conferences

French-American Seminar, Rutgers Univ., New Jersey, U.S.A., ~~Dec. 10 - 12, 1979~~ ^{postponed to spring 1980}

Subject: Mathematical Physics and Statistical Mechanics.

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

Third Open University Statistical Mechanics Conference, Open Univ., Milton Keynes, England, Dec. 11, 1979. (Conference Organizers: O. Penrose, A.I. Solomon)

Subject: Rigorous Results in Statistical Mechanics.

Further information: Mrs. P. J. Coley (Conference Secretary), Fac. of Math., Open Univ., Walton Hall, Milton Keynes, MK7 6AA, England.

Nonlinear Dynamics, New York Academy of Sciences, Dec. 17 - 21, 1979.

Further information: R.H.C. Helleman, School of Physics, Georgia Tech. Atlanta, Georgia 30332.

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)

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.

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.

Operator Algebras and their Applications, Queen's Univ., Kingston, Canada, July 14 - Aug. 4, 1980. (The address for information will be given when the plan becomes definite.)

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.

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 applications 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.

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 stage.

Books

- W. Thirring, Lehrbuch der Mathematischen Physik, Bd. 1, Klassische dynamische Systeme, Springer-Verlag Wien New York 1977
- W. Thirring, Lehrbuch der Mathematischen Physik, Bd. 2, Klassische Feldtheorie, Springer-Verlag Wien New York 1978
- W. Thirring, Lehrbuch der Mathematischen Physik, Bd. 3, Quantenmechanik von Atomen und Molekülen, Springer-Verlag Wien New York 1979

These 3 volumes can be ordered by IAMP-members to a reduced price of DM 30.- per each volume.

W. Thirring, A Course in Mathematical Physics I, Classical Dynamical Systems, Springer-Verlag New York Wien 1978

Reduced price for IAMP-members DM 36.-.

Order forms should be sent to:

Mrs. F. Wagner
c/o Institut für Theoretische Physik
Bötzmannngasse 5
A-1090 Wien
Austria

Preprints

- J. P. Antoine, Inst. de Phys. Théor., Université de Louvain, Belgium,
W. Karwowski, Institute of Theoretical Physics, University of Wrocław,
Wrocław, Poland, Countably Hilbert Spaces and Partial Inner Product
Spaces.
- R. Arens, Dept. of Math., Univ. of California, Los Angeles, Calif. 90024, USA,
Connections as External Fields for Spinning Tops.
- R. Beig, Institut für Theoretische Physik, Universität Wien, Wien, Österreich,
The Static Gravitational Field near spatial Infinity I.
- A. J. Bracken and H. I. Leemon, Dept. of Math., Univ. of Queensland, St. Lucia,
Qld. 4067, Australia, The Isotropic Harmonic Oscillator in an Angular
Momentum Basis: An algebraic Formulation. (To appear, J. Math. Phys.)
- O. Bratteli, Mathematics Institute, Univ. of Oslo, C.P.T. II, CNRS, Marseille
and G. A. Elliott, Math. Inst. Univ. of Copenhagen; Dept. of Math.,
Univ. of Ottawa, On the Possible Temperatures of a Dynamical System.
- J. Brezin and C. C. Moore, Dept. of Math., Univ. of California, Berkeley, Ca.
94720, USA, Flows on Homogeneous Spaces: A New Look.
- D. Brydges and P. Federbush, Dept. of Math., Univ. of Michigan, Ann Arbor,
Michigan 48109, USA, Debye Screening.
- C. Chandler, Dept. of Physics and Astronomy, Univ. of New Mexico, Albuquerque,
N.M., A. G. Gibson, Dept. of Math. and Statistics, Univ. of New Mexico,
Albuquerque, New Mexico 87131, USA, A Two-Hilbert-Space Formulation
of Multichannel Scattering Theory.
- F. Delyon, Centre de Physique Théorique de l'Ecole Polytechnique, Plateau de
Palaiseau - 91128 Palaiseau Cedex, France, The Distribution of Clusters
for the Ising Model.
- B. Demoen, P. Vanheuverzwijn, Instituut voor Theor. Natuurkunde, Univ. Leuven,
Leuven, Belgium, Implementable Positive Maps on Standard Forms.
- M. Cl. Dumont-Lepage, A. Ronveaux, Dept. de Phys., Fac. Univ. N.D. de la Paix,
5000 Namur, Belgium, N. Gani, U.E.R. Informatique, Université de Paris VII,
75005 Paris, France and J. P. Gazeau, Lab. de Chimie-Phys., 11, rue P.
and M. Curie, 75005 Paris, France, Spectrum of Potentials $gr^{-(s+2)}$ via
SL(2, IR) Acting on Quaternions.
- F. Dunlop, Inst. d. Hautes Etudes Scientifiques, Bures-sur-Yvette, France,
Zeros of the Partition Function for some generalized Ising Models.
- R. S. Ellis and J. S. Rosen, Dept. of Math. and Statistics, University of
Massachusetts, Amherst, Mass. 01003, USA, Asymptotics for Certain
Random Fields on a Circle.
- V. Enss, Fac. of Physics, University of Bielefeld, Bielefeld, West Germany,
Scaling Limits of Euclidean Quantum Fields.
- V. Enss, Fac. of Physics, University of Bielefeld, Bielefeld, West Germany,
Addendum to "Asymptotic Completeness for Quantum Mechanical Potential
Scattering, II. Singular and Long-Range Potentials".
- J. R. Fontaine, Inst. de Phys. Théor., Université Catholique de Louvain, Louvain-
la-Neuve, Belgium and Ch. Gruber, Laboratoire de Physique Théorique,
EPFL, Lausanne, Switzerland, Surface Tension and Phase Transition for
Lattice Systems.

- N. Giovannini and C. Piron, Dept. de Physique Théorique, Université Genève, Genève, Switzerland, On the Group-Theoretical Foundations of Classical and Quantum Physics: Kinematics and State Spaces.
- G. A. Goldin, Dept. of Mathematical Sciences, Northern Illinois Univ., DeKalb, Ill. 60115, USA, and Theoretical Division, Los Alamos Scientific Laboratory, and R. Menikoff and D. H. Sharp, Theoretical Division, Los Alamos Scientific Laboratory, University of California, Los Alamos, New Mexico 87545 USA, Particle Statistics from Induced Representations of a Local Current Group.
- K. Goodrich, K. Gustafson, B. Misra, Dept. of Math., Univ. of Colorado, Boulder, Colorado 80309 and Instituts Internationaux de Physique et de Chimie Solvay, Université Libre de Bruxelles, Campus Plaine U. L. B., 1050 Brussels, Belgium, On a Converse to Koopman's Lemma.
- Ch. Gruber, Ch. Lugin and Ph. A. Martin, Laboratoire de Physique Théor., Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, Equilibrium Properties of Classical Systems with Long Range Forces BBGKY-Equation, Neutrality, Screening and Sum Rules.
- R. C. Heitmann and C. Radin, Math. Dept., Univ. of Texas at Austin, Texas 78712 USA, Derivation of a Two-Dimensional Crystal.
- R. H. Herman, Dept. of Math., Pennsylvania State Univ., University Park, Pa. 16802 USA and R. Longo, Dept. of Math., Univ. of Pennsylvania, Phila., Pa. 19104 USA, A Note on the Γ -Spectrum of an Automorphism Group.
- R. H. Herman, Dept. of Math., Pennsylvania State Univ., University Park, Pa. 16802 USA and J. Rosenberg, Dept. of Math., Univ. of Pennsylvania, Phila., Pa. 19174 USA, Norm-Close Group Actions on C^* -Algebras.
- R. H. Herman, Dept. of Math., The Pennsylvania State Univ., University Park, Pa. 16802 USA and O. Takenouchi, Dept. of Math., Eng. School, Osaka Univ., Osaka, Japan, Extensions of d/dx .
- Gerald Hofmann, Sektion Mathematik, Karl-Marx-Universität Leipzig, Leipzig, German Democratic Republic, On the Existence of Quantum Fields in Space-Time-Dimension 4.
- L. P. Horwitz, Y. Lavie and A. Soffer, Tel Aviv University, Ramat Aviv, Israel, Scattering Theory in Relativistic Quantum Mechanics.
- L. P. Horwitz and D. Sepunaru and L. C. Biedenharn, Tel Aviv University, Dept. of Physics and Astronomy, Tel-Aviv, Israel and Duke University, Durham, North Carolina 27706 USA, Some Quantum Aspects of Theories with Hypercomplex and Non-Associative Structure.
- L. P. Horwitz and D. Sepunaru and L. C. Biedenharn, Tel Aviv University, Dept. of Physics and Astronomy, Tel-Aviv, Israel and Duke University, Durham, North Carolina 27706 USA, Quaternion Quantum Mechanics.
- L. P. Horwitz, D. Sepunaru, L. C. Biedenharn, Tel Aviv University, Dept. of Physics and Astronomy, Tel-Aviv, Israel and Duke University, Durham, North Carolina 27705, USA, Factorized Hamiltonian of Kinematical Stability Group in an Octonion Ideal of C_7 .
- D. Iagolnitzer, Service de Physique Théorique, CEN-Saclay, BP n°2, 91190, Gif-sur-Yvette, France and B. Souillard, Centre de Physique Théorique, Ecole Polytechnique, 91128 Palaiseau, France, Random Fields and Limit Theorems. (To appear, the Proceedings of the Estergom 1979 Conference on "Random Fields: Rigorous Results in Statistical Mechanics and Quantum Field Theory".)

- Y. Itagaki, Dept. of Math., Miyagi Univ. of Ed., Sendai 980, Japan, An axiomatization of physics - Axioms about elementary waves and definitions of mass, charge, Planck constant - .
- C. Itzykson and J-B. Zuber, CEN, Saclay, Boite Postale N°2, 91190 Gif-sur-Yvette, France, The Planar Approximation (II) (Submitted, Journal of Mathematic Physics.)
- S. Joga and J. B. Griffiths, Dept. of Mathematics, University of Technology, Loughborough, Leicestershire, England, A Newman-Penrose Type Formalism for Space-Times with Torsion.
- H. Kunz, Laboratoire de Physique Théorique, E.P.F.L., 14, Avenue de l'Eglise Anglaise, Lausanne, Suisse and B. Souillard, Centre de Physique Theorique, Ecole Polytechnique, 91128 Palaiseau, France, Random Schrodinger Operators and the Theory of Disordered Systems: Some Rigorous Results.
- G. Lassner, Joint Institute for Nuclear Research, Dubna, USSR, The Dynamics of the BCS-Bogoljubov-Model in the Thermodynamical Limit.
- G. Lindblad, Dept. of Theor. Physics, KTH, Stockholm, Sweden, Response of Markovian and Non-Markovian Quantum Stochastic Systems to Time-Dependent Forces.
- Ph. Martin and T. Yalcin, Laboratoire de Phys. Théor., Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, The V Charge Fluctuations in Classical Coulomb Systems.
- V. V. Molotkov and I. T. Todorov, Institute of Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences, Sofia, Bulgaria, Frame Dependence of World Lines for Directly Interacting Classical Relativistic Particles.
- C. C. Moore, Dept. of Math., Univ. of California, Berkeley, Ca. 94720 USA, The Mautner Phenomenon for General Unitary Representations.
- H. Narnhofer, Institut für Theoretische Physik, Universität Wien, Wien, Österreich, Does There Exist a Scattering Theory for the Time Automorphism Groups of C^* -Algebras Corresponding to Two-Body Interactions?
- R. C. Newton, Physics Dept., Indiana Univ., Bloomington, Indiana 47405, USA, A New Results on the Inverse Scattering Problem in Three Dimensions. (To appear, Phys. Rev. Lett.)
- R. C. Newton, Physics Dept., Indiana Univ., Bloomington, Indiana 47405, USA, Inverse Scattering, I: One Dimension. (Submitted, J. Math. Phys.)
- R. C. Newton, Physics Dept., Indiana Univ., Bloomington, Indiana 47405, USA, Scattering Theory in the Mixed Representation.
- J. Niederle and J. Tolar, Institute of Physics, Czechoslovak Academy of Sci., 40 Prague 8, CSSR and Faculty of Nuclear Science and Physica Engineering, Technical University of Prague, 115 19 Prague 1, Quantization as Mapping and as Deformation.
- Wilhelm Ochs, Fakultät für Physik, Universität München, Theresienstr. 37, München, West Germany, The set of all projective limits of a projective system of state operators.
- I. Ojima, RIMS, Kyoto Univ., Kyoto 606, Japan, Observables and Quark Confinement in the Covariant Canonical Formalism of Yang-Mills Theory III: "Behind-the-Moon" Problem and Cluster Property. (Submitted, Nucl. Phys. B.)

- D. Preiss, Dept. of Math., Charles Univ., Sokolovská 83, Praha 8, Czechoslovakia and R. Kotecký, Math. Inst. of Acad. of Sci., Žitná 25, Praha 1, Czechoslovakia, Markoff Property of Generalized Random Fields.
- M. Requardt, Institut für Theoretische Physik, Göttingen, West Germany, About the non vanishing of boundary terms in correlation functions as origin of phase transitions. A microscopic proof of a Goldstone theorem in classical statistical mechanics.
- A. Ronveaux, Dept. de Physique, Fac. Univ. N. D. de la Paix, 5000 Namur, Belgium, Polynomes Orthogonaux dont les Polynomes Derives sont Quasi Orthogonaux.
- K. Schmüdgen, Sektion Mathematik, Karl-Marx-Universität Leipzig, Leipzig, DDR, A Proof of a Theorem on Trace Representation of Strongly Positive Linear Functionals on OP^* -Algebras. (To appear, Journal of Operator Theory.)
- K. Schmüdgen, Sektion Mathematik, Karl-Marx-Universität Leipzig, Leipzig, DDR, Graded and Filtrated Topological $*$ -Algebras: I. Graded Normal Topologies.
- K. Schmüdgen, Sektion Mathematik, Karl-Marx-Universität Leipzig, Leipzig, DDR, Graded and Filtrated Topological $*$ -Algebras: II. The Closure of the Positive Cone. (Submitted, Revue Roumaine de Mathematiques Pures et Appliques.)
- C. F. Skau, Dept. of Math., The Univ. of Trondheim, Trondheim, Norway, Geometric aspects of the Tomita-Takesaki theory I.
- Paul Vanheuverzwijn, Instituut voor Theoretische Fysika, Celestijnenlaan 200D, B-3030 Leuven, Belgium, Metastable States in the Infinite Ising Model.
- K. K. Wan, K. McFarlane, Dept. of Theor. Physics, University of St. Andrews, St. Andrews, Fife, Scotland, The Quantization and Measurement of Momentum Observables.
- R. Weder, Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Universidad Nacional Autonoma de Mexico, Apartado Postal 20-726, Mexico 20, D. F., Existence of Monopoles in $SU(3)$ Yang-Mills-Higgs Theories.
- R. Weder, Instituto de Investigaciones en Matematicas Aplicadas y en Sistemas, Universidad Nacional Autonoma de Mexico, Apartado Postal 20-726, Mexico 20, D. F., Existence, Regularity, and Exponential Decay of Finite Energy Solutions to Gauge Fields.
- M. K. F. Wong, Fairfield Univeristy, Fairfield Conn. 06430 USA, On the Multiplicity-free Wigner and Racah Coefficients of $U(n)$.

IAMP NEWS BULLETIN

Progress Report

1. A membership list which was prepared by IAMP Secretary was distributed with the last News Bulletin. An additional list and corrections to the earlier list is enclosed with this News Bulletin. Please check your own name and address. If you find any error, please send us corrections.

The number of members in each country (according to the mailing address) is as follows (as of December 24, 1979):

Australia (11), Austria (11), Belgium (15), Brazil (5), Bulgaria (3), Canada (12), China, People's Republic (1), Czechoslovakia (9), Denmark (6), Egypt (1), Finland (3), France (57), German Democratic Republic (8), Germany, Federal Republic (69), Greece (3), Hungary (2), India (13), Ireland (4), Israel (7), Italy (26), Japan (38), Korea, Republic (1), Malta (1), Morocco (1), Netherlands (7), New Zealand (1), Nigeria (3), Norway (3), Poland (15), Romania (2), Singapore (1), Spain (8), Sweden (2), Switzerland (32), Turkey (1), Union of Soviet Socialist Republics (8), United Kingdom (34), United Kingdom Overseas, Hong Kong (2), United States of America (121), Venezuela (1), Yugoslavia (5).

The following membership numbers are not being used (due to trivial reasons):
173, 206, 303, 304, 520.

2. Methods of paying membership dues presently available are listed in the following. In all cases make sure that the payment include the following information: your name, your membership number and the year(s) for which the payment is intended. (We recommend payment of 3 years dues at a time.) For reduced dues status, consult the last issue of this Bulletin.

(A) U.S. Dollars: The amount is \$10.00 per year. Write a check payable to IAMP and send it to

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

(B) Swiss Francs: The amount is SF 17.00 per year. Send money to the following account:

Crédit Suisse, Geneva
No. 0251.238.577

-
- * 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.

IAMP MEMBERSHIP LIST (ADDENDA)

- 551 Ek B.Y.L., RIMS, Kyoto Univ., Kyoto 606, Japan
552 Nelson B., Relativity Center, Dept. Phys., Univ. of Texas, Austin, Tex.78712, USA
553 Reynolds M., M.I.T. Room 2-088, 77 Massachusetts Ave., Cambridge, Ma.02139, USA
554 Osipov E.P., Dept. of Theor. Phys., Inst. for Math., 630090, Nobosibirsk, 90, USSR
555 Pavlov V.P., Steklov Math. Inst., Moscow, Vavilov str. 42, 117 333 Moscow, USSR
556 Polivanov M.C., Steklov Math. Inst., Moscow, Vavilov str. 42, 117 333 Moscow, USSR
557 Slavnov A.A., Steklov Math. Inst., Moscow, Vavilov str. 42, 117 333 Moscow, USSR
558 Zavialov O.I., Steklov Math. Inst., Moscow, Vavilov str. 42, 117 333 Moscow, USSR

CORRECTIONS

- 85 Choichiro Sunouchi → Sunouchi C.
102 Daoxing Xia → Xia D.
107 Delbourgo R. Dept. Phys., Univ. Tasmania, Box 252C G.P.O. Hobart, Tasmania 7001
Australia
126 Etori K., Dept. Applied Phys., Fac. of Eng., Miyazaki Univ. Miyazaki 880, Japan
147 Fukushima M. College of General Educ., Soka Univ. 236 Tangi, 1 Chome, Hachioji,
Tokyo 192, Japan
206 Hietarinta J., Dept. Phys. and Astro., Univ. Maryland, College Park, Md. 20742,
USA (old address)
536 Hietarinta J., Res. Inst. Theor. Phys., Univ. of Helsinki, Siltavuorenpenger 20,
SF-00170 Helsinki 17, Finland (present address)
249 Kato Y., Dept. Engineering Math., Fac. of Eng., Utsunomiya Univ., Utsunomiya 321-3
Japan
253 Keiichi R. I. → Ito K.R.
373 Ramanaiia G. → Ramanaiiah G.
461 Tam P.K., Math. Dept., New Asia College, Chinese Univ. of Hong Kong, Shatin,
New Territories, Hong Kong
468 Today M. → Toda M., Dept. of Applied Math., Fac. of Eng.,
Yokohama National Univ., 156 Tokiwadai,
Hodogaya-ku, Yokohama 240, Japan
472 Tomiyama J., Dept. of Math., Yamagata Univ., Yamagata 990, Japan
517 Yanase M., Dept. Phys., Fac. Science and Tech., Sophia Univ., Chiyoda-ku, Tokyo 102
Japan
278 Lim C.S. → Lim Chee-Seng, Dept. of Mathematics, Univ. of Singapore,
Singapore 1025.
to be listed under "C".
309 Messner J. → Messer J.

Make sure that a relevant information is included with the payment.

(C) German Marks: The amount is DM 18.00 per year. Make your payment in German Marks directly to the account

No. 9400144
Sparkasse Bielefeld
4800 Bielefeld 1, FRG

of the International Association of Mathematical Physics.

Make sure that a relevant information is included with the payment.

(D) French Francs: This is applicable if you are staying in France or have an account in France. The amount is FF 43.00 per year. The account number:

Paul Belgodère, compte chèques postaux
PARIS 3819 32 Z

(This is an account of Paul Belgodère, who uses this account also for other Societies.)

Methods of payments: Use "chèque postal", "chèque bancaire" or "mandat-lettre de versement" to send money to

Monsieur Paul Belgodère
Institut Henri Poincaré
11 rue Pierre et Marie Curie
75231 PARIS Cedex 05

To show who has paid dues for what period, please fill in the form* at the bottom of this page and send it together with your payment to Mr. Belgodère.

Important Remarks:

1. Do not forget to fill in the form and send it together with your payment.
2. Deadline is December 31, 1979. At the beginning of January, Mr. Gelgodere will send all the dues to our Treasurer Piron.

(E) Japanese Yen: This is applicable if your are staying in Japan or if you have an account in Japan. The amount is ¥2,200 per year. The account of IAMP is

Dai-ichi Kangyo Bank, Hyakumanben branch
No. 1451702. (Huzihiro Araki)

H. Araki

Prize

J. Glimm and A. Jaffe are the recipients of 1979 New York Academy of Sciences Award in Physical and Mathematical Sciences. (Previous recipients of NYAS prizes include E. Lieb and D. Ruelle.)

* the Form for Payment in French Francs:

To be filled in and sent to Mr. Belgodère :

Your Name Membership Number

Address/Affiliation

Amount submitted FF for 1980 - 1981 - 1982 dues
(circle appropriate years)

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)

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.

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

Further information: see detailed announcement below.

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 announcements 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.

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

Further information: Prof. H. Snellman, 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

A Work shop on NONLINEAR EVOLUTION EQUATIONS AND DYNAMICAL SYSTEMS at the Orthodox Academy, Chania, CRETE on July 9 - 23, 1980.

Topics: Nonlinear evolution equations solvable by the spectral transform and related mathematical developments, solitons (theory and applications), integrable dynamical systems, nonlinear problems amenable to (exact, approximate or numerical) analysis in the frame work of recent developments.

Cost: NS\$450 (including registration, accommodation and meals) per participant. Limited accommodations for accompanying persons available (daily all inclusive rates US\$20-25).

The Workshop is intended for persons actively engaged in this research field, and is limited to a maximum number of 70 participants. Leading experts from Europe, the USA, Japan and the Soviet Union will participate.

Deadline: February 28, 1980 (earlier applications have a better chance to be accepted).

Write to: Professor A Verganelakis
Nuclear Research Center "Demokritos"
Aghia Paraskevi - Attiki
ATHENS (Greece)

with a copy sent to: Professor F Calogero
c/o Department of Applied Mathematics
Queen Mary College
Mile End Road
London E1 4NS (England)

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 stage.

Books

- Gert K. Pedersen, *C*-Algebras and their Automorphism Groups*. London Math. Soc. Monographs No. 14, Academic Press, London/New York, 1979. 426 pp., £26 or \$55.
Contents: Abstract C*-algebras, Concrete C*-algebras, Functionals and representations, Decomposition theory, Weights and traces, Type I C*-algebras, Automorphism groups, Spectral theory for automorphism groups, References, Appendix, Subject index.
- B. Simon, *Trace Ideals and Their Applications*, Cambridge University Press, 1979, LMS Notes #35 [134 pages; paper back]. ISBN 0-521-22286-9
- B. Simon, *Functional Integration and Quantum Physics*, Academic Press, N.Y., 1979; Pure Appl. Math. Series #86 [296 pages; list price \$29.50] ISBN 0-12-644250-9

Preprints

- D. Aerts (Theoretische Natuurkunde, Vrije Universiteit Brussel, Pleinlaan 2 1050 Brussel, Belgium) Subsystems in Physics Described by Bi-Linear Maps between the Corresponding Vectorspaces.
- M. Aizenman (Phys. Dept., Princeton Univ., Princeton, New Jersey 08544, USA), F. Delyon and B. Souillard (Centre de Physique Théorique, Ecole Polytechnique, F-91128 Palaiseau, France) Lower Bounds on the Cluster Size Distribution.
- P.M. Alberti and A. Uhlmann (Dept. of Physics and NTZ of Karl-Marx-University Leipzig, 701 Leipzig, GDR) A Note on Stochastic Dynamics in the State Space of a Commutative C*-Algebra.
- P.M. Alberti and A. Uhlmann (Dept. of Physics and NTZ of Karl-Marx-University Leipzig, 701 Leipzig, GDR) Existence and Density Theorems for Stochastic Maps on Commutative C*-Algebras.
- J.P. Antoine (Inst. de Phys. Theor., Université Catholique de Louvain, 1348-Louvain la-Neuve, Belgium) and K. Gustafson (Dept. of Mathematics, University of Colorado, Boulder, Colorado 80309, USA) Partial Inner Product Spaces and Semi-Inner Product Spaces.
- B. Baumgartner (Institut f. Theor. Physik, Universität Wien, Wien, Austria) Classical Bounds on Quantum Partition Functions.
- J. Bernasconi, W.R. Schneider (Brown Boveri Research Center, 5405 Baden, Switzerland) and W. Wyss (Dept. of Physics, University of Colorado, Boulder, Colorado 80309, USA) Diffusion and Hopping Conductivity in Disordered One-Dimensional Lattice Systems.
- H.-J. Borchers, W.D. Garber (Institut f. Theoretische Physik, Universität Göttingen, Bunsenstr. 9, 3400 Göttingen, West Germany) Analyticity of Solutions of the $O(N)$ Nonlinear σ -Model.
- H.-J. Borchers, W.D. Garber (Institut f. Theoretische Physik, Universität Göttingen, Bunsenstr. 9, 3400 Göttingen, West Germany) Local Theory of Solutions for the $O(2k+1)$ σ -Model.

- A.J. Bracken and H.I. Leemon (Dept. of Math., Univ. of Queensland, St. Lucia, Qld. 4067, Australia) A New Set of Coherent States for the Isotropic Harmonic Oscillator: Coherent Angular Momentum States. (Submitted, J. Math. Phys.)
- B. Crell and A. Uhlmann, Karl-Marx-University, Dept. of Physics, 701 Leipzig, GDR) An Example of a Non-Linear Evolution Equation Showing "Chaos-enhancement".
- E.B. Davies (St. John's College, Oxford OX1 3JP, England) Asymptotic Completeness for a Quark Model of Meson Scattering.
- E.B. Davies (St. John's College, Oxford OX1 3JP, England) On Enss' Approach to Scattering Theory.
- E.B. Davies (St. John's College, Oxford OX1 3JP, England) Some Time-Dependent Hartree Equations.
- M. Demuth (Akademie der Wissenschaften der DDR, Zentralinstitut für Mathematik und Mechanik, Mohrenstrasse 39, 108 Berlin, DDR) Scattering by Singular Potentials. I: Markov Process Generators.
- M. Demuth, Akademie der Wissenschaften der DDR, Zentralinstitut für Mathematik und Mechanik, Mohrenstrasse 39, 108 Berlin, DDR) Scattering by Singular Potentials. II: Second Order Elliptic Differential Operators.
- B. Domoen, P. Vanheuzerzwijn (Institut voor Theor. Natuurkunde, Univ. Leuven, Leuven, Belgium) Implementable Positive Maps on Standard Forms.
- R.S. Ellis and J.S. Rosen (Dept. of Math. and Stat., Univ. of Mass. Amherst, MA 01003, USA) Asymptotic Expansions of Gaussian Integrals.
- R.S. Ellis and J.S. Rosen (Dept. of Math. and Stat., Univ. of Mass., Amherst, MA 01003, USA) Laplace's Method for Gaussian Integrals with an Application to Statistical Mechanics.
- V. Enss (Inst. for Adv. Study, Princeton, N.J. 08540, USA) and B. Simon (Depts. of Math. and Phys., Princeton U., Princeton, N.J. 08544, USA) Bounds on Total Cross Sections in Atom-Atom and Atom-Ion Collisions by Geometric Methods.
- V. Enss (Dept. of Physics, University of Bielefeld, 4800 Bielefeld 1, West-Germany) Scaling Limits of Euclidean Quantum Fields.
- W.G. Faris (Dept. of Math. Univ. of Arizona, Tucson, Ariz. 85721, USA) The Rayleigh-Schrödinger Expansion of the Gibbs State of a Classical Heisenberg Ferromagnet.
- C. Gruber, C. Lugin, and P.A. Martin (Lab. de Phys. Théor., Ecole Polytechnique Féd. de Lausanne, Lausanne, Switzerland) Equilibrium Properties of Classical Systems with Long Range Forces BBGKY-Equation, Neutrality, Screening and Sum Rules.
- C.A. Hagedorn (The Rockefeller Univ., N.Y., N.Y. 10021, USA) Semiclassical Quantum Mechanics II: The Large Mass Asymptotics for Coherent States.

- J.L. van Hemmen, W. von Waldenfels (Universität Heidelberg, Sonderforschungsbereich mathematische Modelle, Im Neuenheimer Feld 294, 6900 Heidelberg 1)
On the Dynamical Structure of the Dicke Maser Model.
- R.L. Hudson (Inst. f. Angewandte Mathematik, Universität Heidelberg, Heidelberg, FRG) Notes on Harmonics Analysis and Non-Commutative Probability.
- R.L. Hudson and P.D.F. Ion (Institut f. Angewandte Mathematik, Universität Heidelberg, 6900 Heidelberg, FRG) The Feynman-Kac Formula for a Canonical Quantum-Mechanical Wiener Process.
- W. Hunziker, C. Günther (Institut f. Theoretische Physik, ETH Zürich, Switzerland)
Bound States in Dipole Fields and Continuity Properties of Electronic Spectra.
- W. Hunziker (Institut f. Theoretische Physik, ETH Höggerberg, 8093 Zürich, Switzerland) Schroedinger Operators with Electric or Magnetic Fields.
- J.T. Lewis (Dublin Institute for Advanced Studies, Dublin 4, Ireland) and M. Winnink, Rijksuniversiteit, Groningen, Netherlands) The Ising Model Phase-Transition and the Index of States on the Clifford Algebra.
- J. Lüffelholz (Karl-Marx-University, Dept. of Physics, 701 Leipzig, GDR)
Euclidean Approach to Photon Quantum Field Theory in a Spherical World.
- J. Lüffelholz (Karl-Marx-University, Dept. of Physics, 701 Leipzig, GDR)
Proofs of Reflexion Positivity for Transverse fields.
- J. Mickelsson (University of Jyväskylä, Dept. of Mathematics, 40100 Jyväskylä 10, Finland) The Dirac field as a gauge transformation.
- E.P. Osipov (Dept. of Theor. Phys., Inst. for Math., 630090 Nobosibirsk 90, USSR)
A Constructive Approach to the Exponential Interaction in Four-dimensional Space-time. Preprint TPh-102.
- E.P. Osipov (Dept. of Theor. Phys., Inst. for Math., 630090 Nobosibirsk 90, USSR)
On Triviality of the $\exp\lambda\phi$: Quantum Field Theory in a Finite Volume. Preprint TPh-103. (To appear, Rept. Math. Phys.)
- E.P. Osipov (Dept. of Theor. Phys., Inst. for Math., 630090 Nobosibirsk 90, USSR)
The Yukawa₂ Quantum Field Theory: Various Results (in Russian). Preprint TPh-99. (To appear, Ann. Phys. (N.Y.))
- P.A. Perry (Physics Dept., Princeton Univ., Princeton, N.J. 08544 USA)
Mellin Transforms and Scattering Theory I. Short Range Potentials.
- A. Pflug (Institut für Theor. Physik, Universität Wien, Wien, Austria)
Gravitating Fermions in an Infinite Configuration Space.
- E. Prugovečki (Dept. of Math. Univ. of Toronto, Toronto, Canada M5S 1A1)
A Self-Consistent Approach to Quantum Field Theory for Extended Particles.
- E. Prugovečki (Dept. of Math. Univ. of Toronto, Toronto, Canada M5S 1A1)
Dirac Dynamics on Stochastic Phase Spaces for Spin 1/2 Particles.
- E. Prugovečki (Dept. of Math. Univ. of Toronto, Toronto, Canada M5S 1A1)
General Aspects of Stochastic Quantum Field Theory for Extended Particles.
- E. Prugovečki (Dept. of Math. Univ. of Toronto, Toronto, Canada M5S 1A1)
Quantum Action Principle and Functional Integration Over Paths in Stochastic Phase Space.

- J.V. Pule (Dept. of Math. Physics, University College, Belfield, Dublin 4, Ireland and School of Theoretical Physics, Dublin Institute for Advanced Studies)
A Unified Approach to Classical and Quantum K.M.S. Theory.
- M. Requardt (Institut für Theoretische Physik, Universität Göttingen, D-3400 Göttingen, Bunsenstr. 9, West Germany) About the Influence of Phase Transition on the Dynamical Cluster Properties of Response Functions and Transport Phenomena.
- M. Requardt (Institute für Theoretische Physik, Universität Göttingen, D-3400 Göttingen, Bunsenstr. 9, West Germany) Perturbation Theory of Operators in infinitely many variables.
- S.N.M. Ruijsenaars (Dept. of Phys. Princeton Univ., Princeton, N.J.08544, USA)
A Positive Energy Dynamics and Scattering Theory for Directly Interacting Relativistic Particles.
- S.N.M. Ruijsenaars (Dept. of Phys. Princeton Univ., Princeton, N.J.08544, USA)
On One-Dimensional Integrable Quantum Systems with Infinitely Many Degrees of Freedom.
- S.N.M. Ruijsenaars (Dept. of Phys. Princeton Univ., Princeton, N.J.08544, USA)
The Continuum Limit of the Infinite Isotropic Heisenberg Chain in Its Ground State Representation.
- Y. Saint-Aubin, Dept. de Physique, Fac. Universitaires Notre-Dame de la Paix, 5000 Namur, Belgium) Fonctions Generatrices et Bases D'Integrite pour les Sous-Groupes Finis du Groupe de Lorentz $O(3,1)$.
- E. Seiler (Max-Planck-Institut für Physik und Astrophysik, München, West Germany)
Construction of Quantized Gauge Fields: Continuum Limit of the Abelian Higgs Model in Two Dimensions.
- E. Seiler (Max-Planck-Institut für Physik und Astrophysik, München, West Germany)
Quantized Gauge Fields: Results and Problems.
- B. Simon (Depts. of Math. and Phys., Princeton Univ., Princeton, N.J. 08544, USA)
Mean Field Upper Bound on the Transition Temperature in Multicomponent Ferromagnets.
- B. Simon (Depts. of Math. and Phys., Princeton Univ., Princeton, N.J. 08544, USA)
The Classical Limit of Quantum Partition Functions.
- R.F. Streater, Beford College, Regent's Park, London NW1 3NS, England)
Infrared Bound for the Massless Propagator in a Yang-Mills Field.
- W. Thirring (Inst. f. Theor. Physik, Universität Wien, Wien, Austria)
Bounds on the Entropy in Terms of One Particle Distributions.
- S. Twareque Ali (Dept. of Math., Univ. of Prince Edward Island, P.E.I., Canada CIA 4P3) and E. Prugovecki (Dept. of Math., Univ. of Toronto, Toronto, Canada M5S 1A1) Consistent Models of Spin 0 and 1/2 Extended Particles Scattering in External Fields.
- A. Wehrl (Institut f. Theor. Physik, Universität Wien, Wien, Austria)
Entropy in Quantum Mechanics and the Order Structure of States.
- M.K.F. Wong and Hsin-Yang Yeh (Fairfield Univ., Fairfield, Conn. 06430, USA)
Explicit Evaluation of the Representation Functions of $ISO(n)$.
- M.K.F. Wong and Hsin-Yang Yeh (Fairfield Univ., Fairfield, Conn. 06430, USA)
The Most Degenerate Irreducible Representations of the Symplectic Group.