

Delegates of Individual Ordinary Members to 1974 Council

All Individual Ordinary Members, Article 4 a) and 4 c), are invited to nominate candidates for the election of delegates to EPS Council to take office from 1 April 1974. Members of Council normally serve for three years; if elected to the Executive Committee, they may be reelected for a maximum five years. Three vacancies arise since G. Harbeke, L. Jansen, and W. Klose will have reached the end of their periods of office.

The following representatives of IOM continue to serve after 1 April 1974 in accordance with the Constitution and By-Laws:

H.B.G. Casimir, Eindhoven
B.J. Green, Garching
B.P. Gregory, Paris
A. Guinier, Paris
S.O. Lundqvist, Gothenburg
I. Ursu, Bucharest

For a nomination to be valid:

- the nominee must be an Individual Ordinary Member;
- the nomination form has to be signed by three Individual Ordinary Members;
- it must be accompanied by a statement of consent from the nominee;

Nomination Form for Delegate of Individual Ordinary Members to the EPS Council

We wish to nominate the following candidate (please print):

Name: _____ First name: _____

Full address: _____

Nominated by (please print):

1. Name: _____ Signature: _____

Address: _____

2. Name: _____ Signature: _____

Address: _____

3. Name: _____ Signature: _____

Address: _____

This form has to be received accompanied by a statement of consent from the nominee by 1 January 1974 at the following address:

Main Secretariat
European Physical Society
P.O. Box 39
CH-1213 Petit-Lancy 2
Switzerland

- d) it must be received by 1 January 1974 at the Main Secretariat.

The names and addresses of IOM are printed in *Information Booklets* N° 3 and N° 4 (except for those accepted after July 1972). Names of

Individual Ordinary Members accepted since July 1972 have been published in *Europhysics News*: October 1972, January 1973, April 1973 and September 1973. Complete addresses of these may be requested from the Main Secretariat.

Advanced Computing Methods

The Third Colloquium on Advanced Computing Methods in Theoretical Physics was held at CNRS - Marseilles, from June 25 until June 29, 1973 and was attended by 65 scientists from 14 countries. The meeting was organized by A. Visconti (CNRS, Marseilles) and M. Veltman (CERN, Geneva) together with an international committee of 9 scientists, and was sponsored by CNRS, the European Physical Society, Université de Provence, and Université d'Aix-Marseilles. Invited papers were by 20 speakers covering a wide range of topics in computational physics, 33 contributed papers were also presented.

After some welcoming remarks by A. Visconti, the meeting began with a talk by F. James (CERN) on numerical methods. This was followed by a paper given by Y. Sundblad (Stockholm) which reviewed programs for performing algebraic calculations. This particular talk was supplemented during the meeting by 3 papers on

particular algebraic systems being used for calculations in QED, namely ASHMEDAI (presented by M. Levine, Carnegie-Mellon University), REDUCE (A.C. Hearn, University of Utah) and SCHOONSCHIP (H. Strubbe, CERN). A lively discussion concerning the relative merits and philosophies of these programs followed the presentations.

Talks surveying particular applications of computers to physics were given by J.P. Hansen (Orsay) on Statistical Mechanics, K. Roberts (Culham) on Plasma Physics, J. Calmet (CERN and CNRS Marseilles) on QED, D. Barton (Cambridge) on General Relativity, J. Neubuser (Aachen) on Group Theory and J. Zinn-Justin (Saclay) on Padé Methods. To supplement these presentations other talks were presented on QED by R. Barbieri (Pisa), S. Brodsky (SLAC), P. Cvitanovic (Cornell), T. Kinoshita (Cornell), B. Lautrup (IHES), D. Owen (CNRS, Marseilles), E. de Rafael (IHES), E. Remiddi (Bologna), and R. Roskies (Pittsburgh). Several exciting new calculational techniques

were discussed, and in particular, in the complete analytic evaluation of many quantities in QED such as the sixth-order corrections to the electron magnetic moment, new development looks possible in the near future. Invited papers were also given by R. Russell-Clark (Cambridge) on General Relativity and J.S.R. Chisholm (Canterbury) on Padé Methods.

The Proceedings of the Colloquium will be published in the near future. A.C. Hearn

Field Transport in Semiconductors

Held during the 4-6 July 1973, in Modena, Italy, the International Symposium on High Field Transport in Semiconductors was organized by A. Alberigi Quaranta and M. Costato of the Institute of Physics of Modena University, Italy. The Symposium was sponsored by the European Physical Society, and by the Italian Physical Society (SIF). Financial support was

provided by the Italian National Research Council.

Participants were about 70 coming from all over the world — Austria, Belgium, Denmark, Germany, Great Britain, Italy, The Netherlands, Spain, Sweden, U.S.A. and Japan.

The field covered was the effect of high electric and magnetic fields on the transport properties of charge carriers in semiconductors. The problem area is both fundamental for the understanding of the basic microscopic properties of materials, and applied for use in technological applications, such as Gunn-effect devices, etc. Most of the world's leading schools were represented and an important part of the Symposium was devoted to invited papers which established the present state-of-the-art and pointed to future progress. Notably, the quantum mechanical approach to high field transport, the determination of electron-lattice scattering rates in different semiconducting materials, the oscillatory behaviour of Gunn-effect materials, microwave properties, and a rigorous treatment and understanding of non-local diffusion of charge carriers were covered.

Fawcett of the Royal Radar Establishment (Malvern) opened the Symposium with the first invited paper. The other invited speakers were: Barker (Warwick University), Jacoboni (Modena University), Jørgensen (Technical University, Denmark), Koccevar (Theoretical Physics Institute, Graz University), Lawaetz (Technical University, Denmark), Shaw (Wayne State University), Seeger (L. Boltzmann Institute, Vienna).

Several contributed papers were presented on the effect of Landau sub-bands on longitudinal and transverse magnetoresistance, on transport at very low temperatures in the presence of negative differential conductivity, on magnetic semiconductors, on the interaction of very-high-frequency microwaves with carriers.

The necessity was recognized of reconsidering the present formulation of some scattering mechanisms at high fields, such as the electron-neutral impurity, and electron-optical phonon. On the theoretical side, the extreme power of numerical approaches (e.g. Monte Carlo) was further recognized and, on the experimental side, the first evidence was given in Si of (i) the magneto-phonon effect, and (ii) X-ray scattering by non-thermal phonons.

A. Alberigi Quaranta

Meetings

Meetings organized by EPS Divisions are printed in bold type and boxed; those sponsored by EPS are printed in bold type.

1973

15-16 November

Ternary Semiconducting Compounds
Bath, U.K.

B.R. Pamplin, School of Physics, University of Bath, Claverton Down, Bath BA2 7AY

31 December - 4 January

VII European Conference on Physics and Chemistry of Complex Nuclear Reactions

Kibbutz Ginosar (Sea of Galilee), Israel
Z. Fraenkel, Dept of Nuclear Physics, Weizmann Institute of Science, Rehovot

1974

Early 1974

Advanced Problems in Particle Physics
Padova, Italy

Mrs. M. Baldo-Ceolin, Istituto di Fisica "Galileo Galilei", Via Marzolo 8, I-35100 Padova

5-7 March

4th Meeting of the Committee of the European Solar Radio Astronomers (CESRA)

Berne, Switzerland
E. Schanda, Institute of Applied Physics, University of Berne, Sidlerstrasse 5, CH-3000 Berne

18-24 April

Excited States of Biological Molecules
Lisbon, Portugal

M.D. Lumb, Department of Physics U.M.I.S.T. - P.O. Box 88 Manchester M60 1QD, U.K.

21-24 April

3rd European Symposium on Polymer Spectroscopy

London, U.K.
D.I. Bower, Department of Physics, The University of Leeds, Leeds LS2 9JT

May 1974

State of Order in Amorphous Polymers
Naples, Italy

P. Corradini, Istituto Chimico, Università di Napoli, Via Mezzocannone 4, I-80134 Naples

10-15 June

Hyperfine Interactions Studied in Nuclear Reactions and Decay

Uppsala, Sweden
R. Wäpplén, Institute of Physics, University of Uppsala, Box 530, S-751 21 Uppsala 1

26-28 June

Third International Symposium on Surface Physics: «The Solid-Vacuum Interface»

Utrecht, The Netherlands
G.A. Bootsma, Van't Hoff Laboratorium, Rijks Universiteit, Utrecht

15-19 July

Sixth International Symposium on Discharges and Electrical Insulation in Vacuum

Swansea, U.K.
W.T. Williams, Department of Physics, University College of Swansea, Singleton Park, Swansea, Wales

9-14 September

18th Ampere Congress on Magnetic Resonance and Related Phenomena

Nottingham, U.K.
E.R. Andrew, Department of Physics, University of Nottingham, University Park, Nottingham NG7 2RD

21-26 October

Second EPS Condensed Matter Division Conference. Phonons-Dielectrics

Budapest, Hungary
II. EPS Condensed Matter Division Conference Office, Research Institute for Technical Physics, P.O. Box 76, 1325 Budapest

1975

9-11 April

European Conference on Temperature Measurement

Teddington, U.K.
The Meetings Officer, The Institute of Physics, 47, Belgrave Square, London SW1X 8QX

8-12 July

The Second International Conference on Phonon Scattering in Solids

Nottingham, U.K.
L.J. Challis, Department of Physics, University of Nottingham, University Park, Nottingham NG7 2RD

1-4 September

Electronic Properties of Solids under High Pressure

Leuven, Belgium
L. van Gerven, Laboratories of Solid State Physics, Department of Physics, Celestijnenlaan 200 D, B-3030 Leuven

September

Third EPS General Conference

Bucharest, Romania
European Physical Society, PO Box 39, CH-1213 Petit-Lancy 2, Switzerland

'Summer' School 1974

8-12 July

Scientific Principles of Semiconductor Technology
Bad Boll, Fed. Rep. of Germany

H. Weiss, Siemens AG, Forschung Laboratorium, P.O. Box 80 17 09, D-8000 Munich 80

Readers are invited to submit 'Letters to the Editor' either on items published in *Europhysics News* or on matters which would interest all European physicists.

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