

President Poul Thomsen, Vicepresidents Erwin Baurmann and John L. Lewis,  
General Secretary Maria Ferretti, Treasurer K.A. Thernoë

## 1973 SEMINAR

### THE TEACHING OF ELECTRICITY, MAGNETISM, AND QUANTUM PHYSICS IN SECONDARY SCHOOLS

Chairman: *Arturo Loria*

20th July, 1973

The 4th Seminar, supported by UNESCO and the Ministero della Pubblica Istruzione, sponsored by the Società Italiana di Fisica and the Associazione per l'Insegnamento della Fisica, will be held at Palazzo Sceriman in Venice (Italy) from Sunday 14th until Saturday 20th October 1973.

#### PROVISIONAL PROGRAMME

##### SUNDAY, 14th October, 1973

- 1700 Meeting of the Organizing Committee.  
2100 Official reception.

##### MONDAY, 15th October, 1973

MORNING - Chairman: *Mark W. Zemansky*

- 0900 *Arturo Loria*: Opening address.  
0930 *Poul Thomsen*: «A course in electromagnetism development at the Royal Danish School of Educational Studies, with some apparatus and experiments».  
1030 Coffee.  
1100 *Robert N. Little*: «An inquiry laboratory introduction to electricity for the average individual of secondary school age».  
1300 Lunch.

AFTERNOON - Chairman: *Eric M. Rogers*

- 1530 *Uri Haber-Schaim* (●): «Basic experiments for the study of time-dependent voltages and currents».  
1700 Tea.  
1730 Meeting of the Commission of Representatives.  
1930 Dinner.

##### TUESDAY, 16th October, 1973

MORNING - Chairman: *Karl Hecht*

- 0900 *Harry Messel* and *S. T. Butler* (●): «Relativity and magnetism for high school students».  
*Gomez E. Nagore*: «The teaching of electricity and magnetism at secondary school level in Spain».  
1030 Coffee.  
1100 *Anthony P. French*: . . . . .  
*Kenneth Davis*: «Teaching electricity and magnetism in the U. S. secondary school».  
1300 Lunch.

AFTERNOON - Chairman: *Giulio Cortini*

- 1530 *Geoffrey E. Foxcroft* (●): «The teaching of electronics and its place in a physics course».  
1700 Tea.  
1730 *August Ziggelaar*: «Electromagnetism and light: a significant case in the 19th century's convergence of physical disciplines».  
*S. Mannino* (●), *M. B. Palma* (●), *M. R. Sperandeo*: «An investigation on the understanding of concepts related to electric interactions, at high school level».  
*Gustav Sindler*: «The electronic electroscopes as an aid in teaching of electrostatics».  
1930 Dinner.

##### WEDNESDAY, 17th October, 1973

MORNING - Chairman: *Robert N. Little*

- 0900 *Eric M. Rogers*: «Myths and axioms from pre-science to quantum mechanics».  
1030 Coffee.  
1100 *Paul J. Black*: «The teaching of quantum physics».  
1300 Lunch.

AFTERNOON

- Sightseeing.  
1930 Dinner.

(●) not member of GIREP.

**THURSDAY, 18th October, 1973**

MORNING - Chairman: . . . . .

- 0900 *Uri Haber-Schaim* (●): «Quantum Physics for the senior high school».  
1030 Coffee.  
1100 *Walter Kranzer*: «Relativity and quantum-mechanics in the reform plans regarding Austrian secondary schools».  
*Fletcher G. Watson* (uncertain): . . . . .  
1300 Lunch.

AFTERNOON - Chairman: . . . . .

- 1530 *Eduard J. Wenham*: «The evidence for the quantum: a review of the experimental evidence which can be offered at the level of the secondary school».  
1700 Tea.  
1730 *Maurice G. Ebison*: «Introducing the uncertainty principle».  
*John L. Lewis and Geoffrey E. Foxcroft* (●): «Recent developments in the UK on experimental work in the teaching of electricity, magnetism, and quantum physics».  
1930 Dinner.

**FRIDAY, 19th October, 1973**

MORNING - Chairman: *Fletcher G. Watson* (uncertain)

- 0900 *Arturo Loria and Giovanna Partesotti*: «Development of a quantum physics' teaching line».  
1030 Coffee.  
1100 *Wilfrid Kuhn* (●): «Die behandlung der quantenphysik in der sekundar schule (eine neue konzeption)».  
1300 Lunch.

AFTERNOON - Chairman: *Poul Thomsen*

- 1530 *G. Bergmann* (●): «Supraleitung, ein makroskopisches Quantenphänomen».  
1700 Tea.  
1730 *Julius S. Miller*: «Some dramatic demonstrations in physics, together with some enchanting questions for enquiring minds».  
1930 Dinner.

**SATURDAY, 20th October, 1973**

MORNING - Chairman: *K. A. Thernoe*

- 0900 *Erwin Baurmann*: «The thorough reform of the upper level of the German university preparatory secondary schools».  
1000 *Karl Hecht*: «Concepts for the scientific-technological information of uninterested pre-university students».  
1030 Coffee.  
1100 *John L. Lewis*: «Science and Society: the need to incorporate an awareness of social responsibility into our science teaching».  
1200 *Poul Thomsen*: Closing address.

— The Committee together with A. Loria and G. Partesotti forms the Organizing Committee of the seminar.

— A. Loria, in his capacity as temporary President of the National Section in the host country, is the Chairman of the seminar, according to art. 10 of the Statutes of GIREP.

— The agenda for the meeting of the Commission of Representatives will be the following:

- 1) Election of chairman;
- 2) GIREP activities since the meeting in Kiel, April 1972;
- 3) The treasurer's account;
- 4) Collaboration with other international organizations;
- 5) Suggestions to be considered by the Commission of Representatives;
- 6) Future activities;
- 7) Other' business.

Suggestions for item 5 should be mailed to the President of GIREP at least 14 days before the meeting.

**GENERAL INFORMATION**

— There are still some possibilities to participate: the extreme dead-line, also for material to be circulated, is August 20th.

— Requests for accomodation have been handed over to Palazzo Sceriman (Lista di Spagna 168 - 30121 Venezia - Italy. Tel. 705706 and 36376) who from now on will deal directly with all participants.

— Meals will be served starting on Sunday 14th.

— Apart from accomodation, organization enquires should be addressed to Dr. G. Partesotti - Istituto di Fisica - Via Università, 4 - 41100 Modena - Italy.

In view of the final version, this document is of course open to criticism and advice, which will be most useful if available before August 20th.

# 4th GIREP SEMINAR - VENICE 14-20 OCTOBER 1973

## PROVISIONAL LIST OF PARTICIPANTS

20th July, 1973

### Argentina

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### Australia

*Butler, Stuart T.*: Professor of Physics at the University - Dept. of Theoretical Physics, School of Physics - Sydney NSW 2006.

- *Messel, Harry*: Hopewood Gardens, 19 Thornton St., Darling PT, Sydney.
- Head of the School of Physics - University of Sydney - Sydney NSW 2006.
- Science Adviser to the Australian Government.

### Austria

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### Belgium

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- Physics Teacher at the Koninklijk Atheneum and Lyceum in Ghent.

### Brazil

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### Denmark

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- Universität dozent.

*Hecht, Karl*: Sandkoppel 16, D-23 Kiel-Kronshagen.

- Honorarprofessor an der Universität Kiel.

- ex Direktor des Institut für die Pädagogik der Naturwissenschaften - Kiel.

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### Holland

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- Technische Hogeschool - Eindhoven.

### Israel

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### Italy

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- Professor of Theoretical Physics at Bologna University.

*Ferretti, Maria*: Via Luca Ghini, 6 - 40136 Bologna - Tel. (051) 224281.

- Physics Teacher at the Liceo classico «Galvani» - Bologna.

(\*) Uncertain.

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#### Spain

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- Conesa, Luis Miralles*: General Aranda, 19 8° C - Castellón - Tel. 221436.  
 — Instituto Nacional de Enseñanza media Femenino - Castellón.
- Nagore Gomez, Eduardo*: Colon 7 - Valencia-4 - Tel. 218832.  
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#### Sweden

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#### United Kingdom

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- Lewis, John L.*: Malvern College - Malvern, Worcestershire - Tel. Malvern 61413.  
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#### United States of America

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 — Professor of Physics at MIT.
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 — ex President of the «American Association of Physics Teachers».
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 — up to Sept. 1st: c/o Prof. Harry Messel - School of Physics - Sydney University - Sydney 2006 - NSW (Australia).
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