The 32nd European Physical Society Conference on

**Plasma Physics and Controlled Fusion**

*combined with the*

**8th International Workshop on Fast Ignition of Fusion Targets**

was held in the

**Congress Palace of Tarragona, Tarragona, Spain.**

The conference was organised on behalf of the European Physical Society by the CIEMAT

Madrid, Spain
Preface of the Editors

The 32nd EPS Conference on Plasma Physics and Controlled Fusion was held in the Congress Palace of Tarragona, Spain, from the 27th of June to the 1st of July, 2005.

The scientific programme of the conference and the selection of papers were the responsibility of the International Programme Committee appointed by the board of the EPS Plasma Physics Division. This committee selected 15 invited plenary talks, 46 invited parallel talks, in addition to 23 invited parallel talks corresponding to the Fast Ignition Workshop. Furthermore, 79 oral presentations were given, and 586 poster presentations. Thus, the 32nd EPS Conference brought together 764 plasma physicists from 34 countries.

The Hannes Alfven prize winner presentation corresponded to Malcolm Haines this year, who shared this prize with Tom Sandford and Valentin Smirnov. Malcolm Haines gave a talk titled "Wire-array Z-pinch; a powerful X-ray source for ICF".

The Plasma Physics Division of the EPS sponsored the European Physical Society Plasma Physics Division PhD Research Award to recognise the exceptional quality of work carried out by young physicists as part of their PhD research in any area of plasma physics. This prize was awarded to two students, who each gave a talk on their work: Bruno Gonçalves ("On the statistical properties of fluctuations and transport in the edge region of fusion plasmas") and P. Popovich ("Global solution of the wave equation in 2D and 3D plasmas").

A talk on the ITER site was given by Lina Rodríguez, inserted into the program at the last minute in view of the fact that the ITER project was approved during the conference (at a meeting of heads of state in Moscow).

A side meeting was held concerning the topic of Women in Plasma Physics, during which Maria J. Yzuel gave a short presentation with title "Women in Physics in Spain". Another side meeting concerned Education in Plasma Physics.

As a novelty, a talk was given for the general public, in the Spanish language, by Dr. Ana Inés Gómez de Castro, concerning plasmas in space.

This volume of the series Europhysics Conference Abstracts comprises the list of contributed papers, presented during the conference as oral or poster, that were submitted via the ELISE engine. Only papers submitted before the submission deadline and corresponding to work that was actually presented at the conference are included. The contributed papers are published without refereeing. A copy of this Conference Proceedings CD-ROM will be distributed to the registered participants.

The invited papers have been refereed by members of the international Programme Committee and peers and will be published as a special issue of the journal Plasma Physics and Controlled Fusion. A copy will be sent to each registered participant.

The ELISE conference submission program was developed at the Centre des Recherches en Physique des Plasmas (CRPP) at the Ecole Polytechnique Fédérale de Lausanne (EPFL) by Ch. Nieswand and B.P. Duval.

For this conference it was operated by B.P. Duval for both the abstract submission process and the oral and poster contribution submissions.
Further information on the operation of ELISE for this conference are available in [About the CDRom].

Final editing and CD-ROM production was carried out by the Local Organising Committee using the submissions processed by ELISE.

C. Hidalgo, B.Ph. van Milligen

Programme Committee:

Paul Thomas, CEA (France), Chairman
Emilia Barbato, ENEA (Italy)
Dimitri Batani, INFN (Italy)
Henrik Binslev, Risoe (Denmark)
Richard Buttery, UKAEA (UK)
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Nigel Woolsey, Univ. York (UK)
Matthew Zepf, Queen's Univ.,Belfast (UK)
Sandor Zoletnik, KFKI (Hungary)
Fulvio Zonca, ENEA (Italy)

The responsibility for the parallel sessions was assigned to sub-committees chaired by:

Richard Buttery (Magnetic Confinement Fusion)
Dimitri Batani (Beam Plasmas and Inertial Fusion)
Holger Kersten (Dusty and Low Temperature Plasmas)
Richard Dendy (Basic Plasma Physics and Astrophysics)
The FIW Workshop was chaired by Javier Honrubia.

Local Organising Committee:

Carlos Hidalgo, CIEMAT (Spain), Chairman
Boudewijn van Milligen, CIEMAT (Spain), Scientific Secretary
Lina Rodríguez, CIEMAT (Spain)
María Angeles Pedrosa, CIEMAT (Spain)
Amor Suárez, CIEMAT (Spain)
Francesc Díaz, University Rovira i Virgili (Spain)
Basil Duval, EPFL (Switzerland)

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Ministerio de Educación y Ciencia
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Tesla Engineering Ltd.
The Tarragona Trade Fair and Congress Centre
Universitat Rovira i Virgili