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28th European Physical Society Conference on

Controlled Fusion and Plasma Physics

Madeira, 18-22 June 2001

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Preface of the Editors

The 28th European Physical Society Conference on Controlled Fusion and Plasma Physics was held at the "Madeira Tecnopolo" conference centre in Funchal, Portugal, from 18 to 22 June 2001. It was organized by "Centro de Fusão Nuclear" (CFN) on behalf of the Contract of Association between the European Atomic Energy Community and "Instituto Superior Técnico" (IST), and held under the auspices of the Plasma Physics Division of the European Physical Society (EPS). The Local Organizing Committee (LOC) was composed by members of CFN and of "Universidade da Madeira" (UM).¹

Following the guidelines of the Board of the EPS Plasma Physics Division, the 2001 Conference included topics from the areas of: tokamaks; stellarators; high intensity laser produced plasmas and inertial fusion; alternative magnetic confinement; plasma edge physics; plasma heating and current drive; diagnostics; basic plasma physics; astrophysical and geophysical plasmas; and applied plasma physics. The scientific programme and paper selection were the responsibility of the international Programme Committee (PC), appointed by the Board of the EPS Plasma Physics Division.²

The conference was attended by 620 participants from 34 countries. The Programme Committee selected 5 review, 3 tutorial and 23 topical invited lectures. The 580 contributed papers were presented in 5 poster sessions with 33 also being selected for oral presentation. Additional features of the conference included the Hannes Alfvén Memorial Prize lecture, presented by Professor V D Shafranov, and an evening discussion session at which representatives of the guiding committees of the European Fusion Programme outlined ideas for its development during the 6th European Framework Programme (2003-2006) in view of the possibility of initiating ITER construction during that period. The session allowed members of the European fusion laboratories to exchange ideas with the committee representatives. The conference was also significant for the range and quality of the results from the operation and scientific exploitation of the JET Facilities by the EURATOM Associations under the European Fusion Development Agreement. The invited papers, together with the Hannes Alfvén Memorial Prize lecture by Professor V D Shafranov, have been refereed by members of the international Programme Committee 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 four-page contributed papers are published without refereeing as a Conference Proceedings CD-ROM in the series Europhysics Conference Abstracts of

¹The LOC composition is presented in page iv.

²The PC composition is presented in page iv.

the EPS. The Conference Proceedings have also been made available at the conference website (<http://www.cfn.ist.utl.pt/EPS2001/fin/>). This service has been made available through the ELISE conference submission programme developed by CRPP-EPFL, Lausanne. Final editing and CD-ROM production was carried out by the Local Organising Committee using the submissions processed by ELISE. The EPS-2001 had two satellite meetings:

- 5th Workshop on Fast Ignition of Fusion Targets. This workshop was held at the "Madeira Tecnopolo", in parallel with the EPS-2001 conference. Contributed papers are also available in the CD-ROM proceedings.
- 4th Workshop on the Role of Electric Fields on Plasma Confinement and Exhaust, 24-25 June 2001.

C. Silva, C. Varandas and D. Campbell

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- Universidade da Madeira
- Universidade Técnica de Lisboa
- Centre de Recherches en Physique de Plasmas
- Banco BPI

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Preface to the CD-ROM

The attached CD-ROM contains the contributed papers to the 28th EPS Conference on Controlled Fusion and Plasma Physics, held 18-22 June in Funchal, Portugal. The length of the contributed papers has been limited to 4 pages. Each one of these 4-page papers is stored in one PDF (Adobe Portable Document Format) file. This format was chosen for its portability across different platforms and the availability of free PDF viewers.

The submission procedure

This conference was the third time that the ELISE conference submission program was used for collecting the contributed papers. ELISE was developed by Ch. Nieswand and B. Duval at the Centre de Recherches en Physique des Plasmas (CRPP) at the École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, and it is basically a webserver running on the local organisers' computers. The authors were requested to prepare their contributed papers in either PDF or Postscript format and to upload it to ELISE using its web interface. The program processed these files and generated a preview image, which could be checked by the author. ELISE worked rather well during the submission; over 90% of the papers were collected without operator intervention. The final submitted papers were stored by ELISE and made available on the World Wide Web after the conference. The CD-ROM proceedings contains 529 contributed papers.

For security reasons, a printed version of the papers has been requested as well. The authors who did not succeed in submitting their files had the chance to contact the local organisers either by e-mail or personally during the conference. Many incompatibility problems were solved in this way. The Local Organising Committee accepted all PDF files readable with Adobe Acrobat 4.0. Only 10 papers that theoretically met all requirements and that could be correctly viewed in Acrobat 4.0, were rejected or not processed correctly by the program.

About the CD-ROM

For the CD-ROM, a header and a page number were added to all pages of the contributions. This way, the papers constitute the pages of a virtual conference proceedings book and individual papers can be referenced in a normal way:

Europhysics Conference Abstracts Vol. 25A <ppp> (2001),

where <ppp> is the page number. Two tables of contents are available on the CD and in the booklet: one by session, the other by topic. The contents and authors index are also linked on the CD, clicking on a contribution the proceeding is opened at the appropriate page.

The collection of papers can be accessed in two independent ways; either in HTML using a frame capable web browser (like Netscape or Microsoft Internet Explorer) or in PDF using Adobe Acrobat Reader (version 4 or greater). The HTML version features multiple indices (sessions, topics and authors) with HTML links to each paper in PDF format. This version contains a full cross-reference table of authors/papers. Navigation in this view is very similar to browsing a website.

In the PDF version, in addition to the usual navigation across papers and indices, papers are also searchable by means of a search engine included in the CD-ROM. To make navigation easier, buttons were added to the top of each page. These buttons link to the main navigation window (main), to the indices (sessions, topics and authors) and to the following and previous paper. These buttons are visible on the PDF browser but will not be printed. The main navigation window contains links to the table of contents, indices, the search engine and to the help pages. The format of the PDF version is similar to that of the booklet, and therefore we suggest using this version for printing.

The table of contents and author index may be used to find a contribution by paper or by author. For browsing papers, we suggest using the sessions index. If necessary, the papers can also be accessed directly in the directory pdfs of the CD; the file names correspond to the session numbers.

Technical information

At present, the CD-ROM production is not part of ELISE and incompatibility between PDF file writers and readers caused many problems, which had to be handled one-by-one. The problem was aggravated with the appearance of Acrobat 5: some papers processed by ELISE could be displayed with Acrobat 4, but failed in Acrobat 5. Most of the incompatibilities with the PDFs generated by ELISE were solved but some problems may persist, in particular for fonts using non-standard encodings (mostly in formulas).

Please note also that the quality of the papers on the CD depends on how they were originally prepared by the authors. Some files contain figures with poor definition, which also don't print reasonably.

The search engine available in the PDF version of the CD offers the possibility to search in any frame capable and Java-enabled web browser, like any version released in the last 3 or 4 years of Windows Internet Explorer or Netscape. This raises some issues that can't unfortunately be solved without interfering with user's preferences for the browser. The changes are however quite simple: please refer to the help pages for more information.

C. Silva, J. Pires and R. Nóbrega

Lisboa, December 2001