Preparation and Submission of a Manuscript for the Proceedings of the Fusion Energy Conference

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Abstract. Since 1998, the proceedings of Fusion Energy Conferences (FECs) are being published electronically on CD-ROM and the Internet. Therefore, for publication in the proceedings, authors must submit their papers in electronic format via our web browser based, password protected file submission system, called LISA (Lightweight Interactive Storage Application for the Collection of Conference Contributions). LISA was developed in 2000 and further improved in 2002 to help authors to submit their conference contributions in appropriate electronic format. Portable Document Format (PDF) will be the required format for submission of contributions. In exceptional cases, when an author is not able to produce a usable file in PDF, Postscript (PS) format will also be accepted. No other formats will be accepted. This paper describes the required layout for the full manuscripts, gives examples of how to convert them to PDF or PS format, and tells how to submit them electronically through LISA. LISA will be operational for electronic submission of full manuscripts from 15 March till 16 April 2004. In all cases, a paper copy of the manuscript must also be sent to the IAEA. The deadline for receipt of paper copies is the same as for electronic submission: 15 October 2004.

1. Introduction

With the Fusion Energy Conference (FEC) held in October 1998 in Yokohama, Japan, the IAEA began publishing the proceedings of this series of conferences electronically on CD-ROM and the Internet. The proceedings of the FEC 1998 (2001 Edition), FEC 2000, held in Sorrento, Italy, in October 2000 and FEC2002, held in Lyon, France, in October 2002, can be found on the IAEA Physics Section home page: http://www.iaea.org/programmes/ripc/physics/. The proceedings of the FEC 2004, to be held 1–6 November 2004 in Vilamoura, Portugal, will be published in the same way. There will be no hard copies of the proceedings. The publication on CD-ROM and the Internet is a cost free service provided by the IAEA to participants of this series of conferences as well as to interested persons, institutes and libraries. In addition to the electronic proceedings on CD-ROM and the Internet, authors are encouraged to submit their full manuscripts to the **Nuclear Fusion** journal. The manuscripts will undergo the normal refereeing procedure and, if accepted, will be edited and published in the journal (see also the FEC 2004 announcement, Section 8.d (http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=116)
Since the FEC 2000, the IAEA provides a user friendly web browser based, password protected interface system called **LISA**, developed by Martin Kriech with support from U. Schneider, to help authors to submit their contributions (full manuscripts and – since 2002 – also the short abstracts and the two-page synopses) in correct formats and on time. This paper describes the particular requirements for the **layout** of the full manuscripts (Section 2) and where to send the **paper copy** (Section 2.9), ways to convert the manuscripts into correct **PDF** or PS format (Section 3), and the only way to **submit** them **electronically** to the IAEA (Section 4). **Please read these instructions carefully and follow the guidelines strictly.** These measures will help main authors and submitters of papers as well as the producers of the CD-ROM, to get all correctly submitted manuscripts published soon after the conference.

2. Preparation of Manuscripts (Source Files)

This section describes requirements for the layout of manuscripts to be produced by a word processor (e.g. Microsoft Word, LaTeX), which then have to be converted to PDF or PS format for subsequent electronic submission to the IAEA.

2.1. Length of Manuscripts

Papers must **not exceed the number of pages** specified below:

- Summaries: 20 pages
- Overviews: 12 pages
- Orals: 8 pages
- Posters: 8 pages

Please note: **rapporteured papers** are considered as posters (maximum number of pages: 8).

2.2. General Layout

Paper Size: Please use these instructions as an example of the required layout. Use A4 format only, 21 cm x 29.7 cm (portrait format). The required margins are given in Table I below (resulting typing area: 16 cm x 24.7 cm).

TABLE I: MARGINS FOR YOUR MANUSCRIPT.

Margin	**A4 Format**
Left	2.5 cm
Right	2.5 cm
Top	2.5 cm
Bottom	2.5 cm

Fonts: Important – Use Times or Times New Roman[1] 12 point size only (other sizes as specified), and Symbol font for mathematical symbols (in the **text** and in the **figures**).

- Justification should be set to full (or left only, if preferred).
- Do not underline: Use *italics*, **bold** or ***bold italics*** instead[2].
- Line spacing should be set at 1 (single).
- Leave a line space between paragraphs and sections.
- Leave a line space between section titles and text.
- Leave only one space after a full stop.
- **Insert your paper number** on the top right corner of each page (**14 point size bold**) within the area of the top margin (at least 1.0 cm from the upper edge of each page). You may also insert a page number on every page (see examples in this paper).

[1] Authors are requested to use the (PostScript printer's) Times or the (TrueType) Times New Roman font and the standard Symbol font only, in order to produce PDF or PS files having good performance. Other fonts used in the source files increase the risk of getting unreadable PDF or PS files. LaTeX users may use Computer Modern or related fonts too, but need to ensure that the Type 1 (outline) version of the fonts is embedded in the PostScript or PDF file; packages like "times" together with "mathptm" may be an alternative.

[2] Underlined words/sentences usually indicate Internet links.

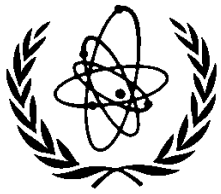

FIG. 1. IAEA logo.

The **first page** of the full manuscript must begin with the title of the paper centred on the page in **14 point Bold Title Case** (title case means first letter of each main word capitalized), the names of the authors (Initials – followed by a period each – Family Name) with the main author's name mentioned first, the names and locations of the authors' affiliations (Title Case), and the e-mail address of the main author (for an example, please see the title, authors and affiliations of these instructions).

The paper must begin with an **abstract** not exceeding 2400 characters (single paragraph, no references or footnotes, Times or Times New Roman 10 point).

Widow/Orphan lines: Never start a page with the last line of a paragraph or of a displayed list, and never finish a page with the first line of a paragraph or a displayed list, or a section title. Make sure that all headings are followed on the same page by at least two lines of text.

2.3. Section Headings and Numbering

Each new section and subsection should have a heading consisting of an Arabic numeral followed by a period, a single space and then the section title (**12 point Bold Title Case**, see these instructions).

2.4. Mathematical Signs and Symbols

For mathematical signs in the text use special characters, "·" or "x" for the multiplication sign, "-" for minus, "+" for plus, and "·" for combining units (e.g. MW·h). Mathematical symbols must be clearly and consistently typed to ensure that their meanings and positions are unambiguous.

2.5. Footnotes

Footnotes should be numbered with superscript Arabic numerals; the number and the text should both be typed in Times or Times New Roman 10 point. Footnotes to the text should be typed at the foot of the appropriate page (see examples in this paper).

2.6. Figures and Tables

For figure numbering and captions, use Arabic numerals and text in *Times* or *Times New Roman 11 point italics (see FIG. 1 above).* For table numbering and headings, use Roman numerals, TIMES or TIMES NEW ROMAN 11 POINT UPPER CASE (see Table I above). Lettering in figures and tables should be large enough to reproduce clearly **and only the approved fonts may be used**. Ensure that figures and tables are clear and reproducible. Do not use too fine lines, too light colours, etc. All figures and tables should be **cited** in the text and should be **numbered** in the order in which they are first mentioned.

Figures and tables should be placed at the top or bottom of a page as near as possible to the place where they are first mentioned. The **table width** should not exceed 16 cm (if less than 16 cm, centre the table) or, for a table in landscape format, 25 cm.

2.7. Other Issues

Numbering of sections, paragraphs, references, figures, pictures, tables, equations and footnotes should be consecutive throughout the paper. **Abbreviations** should be explained when they first appear, unless they are commonly understood by the readership to which the paper is addressed. Express all **physical quantities in SI units**.

For **pictures and photographs** please include an electronic image in the document. Take care: pictures and photographs may increase the file size of your manuscript tremendously. Make sure that the file size of your manuscript converted to PDF does not exceed 20 MB (see also Section 4.3. (c)).

2.8. References

Please use the **reference style** given in the enclosed sample of references (Appendix 1). References should be numbered (Arabic numerals in square brackets, e.g. [12]) in the order in which they are first mentioned, and listed at the end of the paper. If a reference is cited first in a figure caption or table, it should be numbered according to the place in the text where the figure or table is first cited. Please ensure that journal references contain the journal name, volume number, year and page number. Paper numbers should be given in the case of electronically published conference proceedings. For all proceedings, the location and year of the conference should be given, and for both proceedings and reports, the name of the publisher and the place and year of publication should also be included.

2.9. Submission of Paper Copies of Manuscripts

No longer required submission of paper copy. For electronic submission of your manuscript please see Section 4. below.

Please note: Papers will not be edited or retyped by the IAEA before copying on CD-ROM and the Internet.

2.10. Recommendations

Authors should **proof read** their text carefully and finally run the source file through a **spelling checker** before converting it to PDF or PS format. Authors should check their manuscript in PDF or PS format for readability and printability before submitting it electronically to the IAEA.

3. Conversion of a Source File into PDF or PS Format

As an author of a paper accepted for the FEC, you have already submitted a two-page synopsis in correct PDF (in exceptional cases PS format) during the submission period. This leads to

the assumption that you are already familiar with the process of converting source files (Word, LaTeX, etc.) into the required format. If this is the case, you may skip reading this section and go directly to Section 4., Electronic Submission of Papers. Nevertheless, we recommend that you follow carefully the **Recommendations in Section 3.3**.

General Information: PDF was chosen as document format. Each author should submit his or her paper in PDF only. No other formats will be accepted. Only in exceptional cases, when authors are not able to convert their source files into PDF, will we accept PS files, provided they are in correct format.

In principle there are two ways of creating correct PDF files:

- Writing to a PostScript file first, which then has to be converted to PDF with Adobe Acrobat Distiller or similar software in a second step;
- Creating PDF directly from within the text processing software (needs Adobe Acrobat Writer or similar software installed on your computer).

3.1. Creation of PS Files

Postscript (PS) is a language developed to communicate with printers. The following describes the way to convert the source file (e.g. in Microsoft Word or LaTeX) of your manuscript to PS format. For conversion of source files produced with different software, please contact your local software and computer experts.

- **Microsoft Word for Windows (a similar procedure for Word for MacOS)**
  Make sure that the PostScript printer driver is set up to use PostScript **Type 1 fonts**. To save a Word document as a PS file:

  1. open your source file,
  2. in the MS Word “File” menu click on “Print”,
  3. in the “Name” box, click at the appropriate PostScript printer,
  4. make sure that the “Print to File” check box is selected,
  5. then click “OK”.

  You will be asked for the file name. Type the file name of your source file. **If the file is saved with a “.prn” extension, rename it to a file with the extension “.ps”.**

- **LaTeX**
  Authors using LaTeX with UNIX, Windows or MacOS need to run **dvips** or a similar programme to generate the PS file; they should ensure that **Type 1** (outline) fonts are used.[3] Authors may consider using pdfLaTeX instead to produce PDF directly from the LaTeX source.

- **Possible problems**

  If you encounter problems in producing, viewing or printing a PostScript file, please consult your local software experts. Make sure your printer is a PostScript printer. You

[3] Additional information may be found on the Internet

may check your PS file with Ghostscript/Ghostview, available free of charge from the following Internet address:

URL: http://www.cs.wisc.edu/~ghost/index.htm

or other PS compatible software to view a PS file. Make sure to have the latest version of Ghostscript (Aladdin 7.0 or higher or GNU 7.0 or higher) on your PC because older versions have a number of incompatibilities.

3.2. Creation of PDF Files

To convert a PostScript file to PDF, you will need Adobe Acrobat 4.0 or higher or similar software. To convert the source file of your manuscript to PDF from within the word processing software (e.g. MS Word), you will need Adobe Acrobat Writer or similar software. Please follow the instructions of your software and **make sure that**

1. the fonts used in the document get embedded in the PDF file,
2. Acrobat 3 compatibility mode is set, and
3. document security settings are not used.

- **Possible problems**

  If you encounter problems in producing, viewing or printing a PDF file, please consult your local software experts. The newest version of Acrobat Reader can be downloaded for free from the Internet:

  URL: http://www.adobe.com/products/acrobat/readstep.html.

3.3. Recommendations

After generating the PDF or PS file, we urgently recommend that authors review their PDF or PS file by **printing** it and **proof reading** the output **before submitting the file electronically through LISA to the IAEA**. Carefully check the margins, mathematical symbols, graphics, pictures, etc. If you experience any problems, please contact your local software and computer experts. For detailed information, visit the Adobe Acrobat and Ghostscript home pages on the Internet (Internet addresses are given above).

4. Electronic Submission of Papers

URGENT: The full manuscript must be submitted through LISA, our web browser based file submission system with password based access control for electronic submission of FEC contributions. You – the author or submitter – must use the same user account (= e-mail address) and the same password as specified for abstract and synopsis submission. Submissions by e-mail, fax or any other means will not be accepted.

Only authors/submitters of accepted FEC contributions will be able to access LISA. The system is able to check automatically incoming files in the specified formats and convert PS files automatically to PDF. You – the author or submitter – already submitted a two-page synopsis and a short abstract through LISA during the submission period. The submission process for a full manuscript will be very similar to that for abstract and synopsis submission.

Besides the full manuscript in PDF you have to submit additional information, especially names and affiliation of co-authors and keywords, that will be used for the navigation and index pages on the CD-ROM and the FEC proceedings web site (see, for example, the FEC 2002 proceedings: http://www.iaea.org/programmes/ripc/physics/). Data provided during the abstract and synopsis submission period (paper title, main author, abstract, etc.) have been saved in LISA and do not need to be submitted once more. The abstracts may have been slightly modified in several cases with respect to mathematical formatting.[4] You may change the abstract if it is absolutely necessary, however, this is not recommended.

4.1. Requirements for Electronic Submission

Authors will need to have a reasonable web browser able to do **HTTP** (Hypertext Transfer Protocol) file uploads, e.g. Netscape Navigator 3.0 or higher, Internet Explorer 4.0 or higher, or any other web browser capable of uploading files by HTTP.

4.2. File Formats

Only files in Portable Document Format (PDF) or PostScript (PS) format will be accepted, as described in Section 3 (PS files may be compressed, in zip or gzip format).

4.3. Electronic Submission of Auxiliary Information, Keywords and Full Manuscript

Start your web browser on your computer. In the "File" menu or similar click on "Open" and type in (or click directly on)

http://www.iaea.org/cgi-bin/lisa/start

This link will start the initial page of LISA. You will be asked to type in your user account (=e-mail address) and the password specified during the abstract and two-page synopsis submission period. Click on the button "**Login**". After you have successfully logged in, you will be guided through LISA in a similar way as for abstract and synopsis submission (for details please see below). This time, **auxiliary information** will be needed (co-authors, keywords). The **submission process** for the full manuscript includes the following steps (**submitters of more than one paper: please read Section 4.4.**):

a) submit auxiliary information,
b) submit keywords for your full manuscript,
c) submit your full manuscript in PDF (or PS format),
d) logoff from the site (do not forget this important step).

a) Submit auxiliary information

As you may already have noted from the FEC 1998/00/02 proceedings, the navigation through the CD-ROM and the proceedings web site is based on comprehensive summary pages for

[4] We requested authors not to use mathematical characters, expressions and symbols in the short abstract. Unfortunately, many authors ignored our request. However, special characters were not transmitted correctly in several cases. The resulting formulas were difficult to understand or unreadable at all. We decided to allow some simple mathematical formatting in the abstracts and used LaTeX to implement this feature.

each paper and on index lists. All authors' names and affiliations will appear in these pages as typed in during the electronic submission of a full manuscript!

You are asked to type in all co-authors of your paper in the first box of this interactive page according to the following rules: "Initials (each followed by a period) Family Name" followed by " #)" and a comma. The comma is needed for separating the author names in our software that will be used for producing the proceedings (no semicolons or other means of separators). The "#" refers to the authors' affiliations; the main author – as defined during the abstract and synopsis submission period – is automatically given affiliation number "1)".

Example: if the main author was *F.Prefect*, from *The Islington Institute*, who wrote the paper together with two colleagues from the same institute (*A. Dent*, *T. McMillan*) and some other people (*Z.B. Brox*, *S.B. Fast*; please note: no space between the Initials), you would write:[5]

Co-authors:

Z.B. Brox 2), A. Dent 1), S.B. Fast 3), T. McMillan 1)

Do not include the main author's name in this list; this name is already saved in LISA. The co-authors' affiliations and addresses have to be typed now into the second box, preceded by the reference numbers defined in the first box. The main author's affiliation will automatically appear in this box preceded by "1)". Affiliations have to be numbered consecutively – in our example from "1)" to "3)":

Co-authors' affiliations:

1) The Islington Institute, Islington, United Kingdom 2) Improbability Labs, Damogran, France 3) Landscape Modelling Ltd, MA, Magrathea

Fill in all affiliations of your co-authors. Click on the button **"Submit"** afterwards; you will be informed if the submission succeeded. Then click on the button **"Continue"** to continue.

Please note: we have chosen this procedure for co-authors' names and affiliations to protect authors/submitters of full manuscripts from having to go through an "endless" list of text boxes, especially in the case of long author lists. To ease the life of the producers of the FEC proceedings, please handle this part of the submission process very carefully.

b) Submit keywords for your full manuscript

Please choose up to **five keywords** for your paper out of the predefined keyword list; just click on the keywords appropriate for your paper. If you encounter problems in clicking on more than one keyword, please consult your local software specialist. A printout of the predefined keyword list is attached to these author instructions (Appendix 2). Click on the button **"Submit"** afterwards; you will be informed if the submission succeeded. Then click on the button **"Continue"** to continue.

[5] You may want to use the same format within your paper, so that you can simply copy and paste the information from your paper into the web browser window (please see the author list and affiliations of these instructions).

c) Submit your full manuscript in PDF (or PS format)

Select the PDF or PS file you intend to submit from your computer. Either type the filename into the input box or click on the button which says **"Browse"** and choose your file. Then click on the button **"Submit"** to submit your paper through LISA.

If LISA is able to open and read your submitted file without problems, you will receive a message **"Submission successful"**. Otherwise you will receive an automatic response, **"Try it again"**, together with the error messages generated by Acrobat Distiller. Based on these error messages, you will have to check your manuscript, make the required corrections and submit your file again. Then click on the button **"OK"** to continue.

Please note: LISA allows up to ten uploads per paper. Files exceeding 20 MB will not be accepted.

d) Logoff from the site (do not forget this important step)

Please logoff when you have submitted all the information described above. This is an urgent step, otherwise the system would still allow input concerning your paper after you have finished your work. This might give someone else a possibility to alter your data. At this stage you may decide to:

- logoff immediately or
- return to the main menu and change information already submitted (contact information, password, short abstract).

In case you decide to go to the main menu, please note:

- From within the main menu you may select the items you want to change by clicking on the left hand menu bar.
- If you need to change the abstract, please be aware that it might contain text formatting commands in LaTeX format which you should not change. To enter special characters or mathematical operators, follow strictly the instructions given online in LISA.
- Do not forget to logoff when you have completed your changes.

4.4. Information for Submitters of More Than One Full Manuscript

Submitters of more than one full manuscript will be guided to LISA's "Paper" menu after logging in. Select the paper title for which you intend to submit the requested auxiliary information, keywords and full manuscript in PDF. Then click on **"OK"**. From this point on you must go through the same steps as described in Section 4.3. After finishing the input work for one paper, you will be asked either to logoff or to continue with one of the other papers. If you decide to continue with one of the other papers, you will be shown LISA's "Paper" menu once more and may continue as described above. In case you decide to logoff, you may return to LISA later and provide the necessary data and PDF file for each paper, but keep in mind the deadline for submissions.

4.5. Modification of Information, Revision of Manuscripts

If you wish to correct some part of the information described above, please open your browser again and connect to LISA as described in Section 4.3. The main menu will show up, which

allows you to choose one of the functions described in Section 4.3. If you have submitted more than one paper, select the appropriate paper out of the “Paper” menu. Make the necessary corrections in the same way as described above. If you wish to alter your submitted PDF or PS file, simply resubmit a new version during the submission period. Please have in mind the maximum number of uploads per paper (ten) and the maximum file size (20 MB).

Authors who are requested by the editor to improve their documents will get access to LISA after the conference. These authors will be notified directly at the conference about the deadline for resubmission of their papers.

5. Deadlines

Please check about deadlines in section 15 of the conference announcement:
http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=116

6. Copyright and Publishing

All authors have been requested to sign IAEA Form B, “Submission of a Paper”, assigning the IAEA either copyright or a non-exclusive, royalty free license to publish. Authors are responsible for ensuring that nothing in their papers infringes any existing copyright. If previously copyrighted material is included, authors must provide evidence that the copyright holder has given permission for its use.

Although it is hoped that it will be possible to publish all the papers from the conference on CD-ROM and the Internet, the final decision on each paper can only be taken by the IAEA after the conference.

7. Final Remarks

We hope that our improved and extended file submission system LISA has helped and will continue to help authors to submit their contributions in correct formats and on time, but this will also require some effort from the authors, as described above. We kept the file submission system as simple as possible to ease your life but, please, follow the instructions strictly. Authors are reminded that it is their responsibility to produce their PDF or PS files in correct formats. We have seen from the abstract and synopsis submission that LISA works reliably and that authors/submitters had no problems with it. Nevertheless: we wish you good luck!

Appendix 1: Examples for the Reference Style

[1] INTERNATIONAL ATOMIC ENERGY AGENCY, Evolutionary Water Cooled Reactors: Strategic Issues, Technologies and Economic Viability, IAEA-TECDOC-1117, Vienna (1999).

[2] FIL, N.S., et al., "Balancing passive and active systems for evolutionary water cooled reactors", Evolutionary Water Cooled Reactors: Strategic Issues, Technologies and Economic Viability, IAEA-TECDOC-1117, Vienna (1999) 149–158.

[3] Energy from Inertial Fusion, IAEA, Vienna (1995) 95–111.

[4] Topical Issues in Nuclear, Radiation and Radioactive Waste Safety (Proc. Conf. Vienna, 1998), IAEA, Vienna (1999); Contributed Papers (CD-ROM).

[5] INTERNATIONAL ATOMIC ENERGY AGENCY, Isotope Techniques in Water Resources Development and Management, C&S Papers Series No. 2/C, IAEA, Vienna (1999) (CD-ROM).

[6] LAO, L.L., et al., "Effects of Plasma Shape and Profiles on Edge Stability in DIII-D", Fusion Energy 1998 (Proc. 17th Int. Conf. Yokohama, 1998), C&S Papers Series No. 1/C, IAEA, Vienna (1999), CD-ROM file EX8/1 and http://www.iaea.org/programmes/ripc/physics/fec1998/html/fec1998.htm.

[7] TAIT, W.H., Radiation Detection, Butterworth, London (1980).

[8] GRAMBOW, B., et al., "Chemical stability of a phosphate glass under hydrothermal conditions", Scientific Basis for Nuclear Waste Management (Proc. Symp. Boston, 1979), Vol. 2 (NORTHRUP, C.J.M., Jr., Ed.), Plenum Press, New York (1980) 109–116.

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[11] DEL CASTILLO, D., Dynamics and Transport in Rotating Fluids and Transition to Chaos in Area Preserving Non-twist Maps, PhD Thesis, Univ. of Texas, Austin (1994).

[12] KUANG, Guangli, et al., "Lower hybrid current drive experiments and improved performance on the HT-7 superconducting tokamak", Nucl. Fusion **39** (1999) 1769.

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[14] VON DRASCHE, R., Acquired cell mediated immunodepression effects in acute Chagas' disease, J. Clin. Invest. (in press).

[15] REFORMATSKIJ, I.A., Laboratories for Work with Radioactive Substances, Atomizdat, Moscow (1979) (in Russian).

[16] PHILLIPS, S.M., Kernforschungsanlage Jülich, KOCH, D., Physikalisch-Technische Bundesanstalt, Braunschweig, personal communication, 1995.

[17] UNITED STATES DEPARTMENT OF ENERGY, Aerosol Fog System for Fixing Radioactive Contamination, Technology Deployment Fact Sheet (1999), http://www.hanford.gov/techmgmt/factsheets/deploys/fogger.htm.

Appendix 2: Keyword Index

conventional scenarios

cooling system

core density fluctuations

core micro-instability

core transport

core turbulence

correlation length

counter injection

cross field transport

cryogenic system

current density profile

current drive

current free plasmas

current hole

current profile control

current profile modification

D-D fusion reactor

D-inventory

D-T experiments

D-T fusion reactor

D-T plasmas

data acquisition

density control

density limit

detachment

detached divertor plasmas

diffusion coefficient

dipole confined plasma

direct drive

disruption

disruption avoidance

disruption control

disruption resilience

divertor/divertor region

double barrier

drift waves

drift Alfvén waves

drift wave dynamics

drift wave turbulence

drivers

economic aspects

eddy currents

edge database

edge modes

edge pedestal

edge plasma

edge turbulence

electric tokamak

electromagnetic turbulence

electron beam heating

electron Bernstein waves

electron cyclotron current drive

electron cyclotron resonance heating

electron density

electron dynamics

electron temperature gradient

electron transport

ELM free regimes

ELMs

ELMy H mode

energetic particles

energy confinement

energy transport

enhanced D-alpha H mode

enhanced performance

environmental aspects

ergodic divertor

erosion

error field modes

external helical fields

external transport barriers

fast ignition

fast ignitor

fast particle instabilities

fast particles

fast potential changes

feedback control

feasibility studies

field reversed configuration

filamentation

first wall

fishbones

flow shear stabilization

fluctuations

fluid simulations

flux dependence

flux driven turbulence

Fokker-Planck simulations

functional ceramics

fusion experimental breeder

fusion gain

fusion power

fusion triple product

fusion technology applications

fusion-fission hybrid reactor

fusion fuel cycle

gas dynamic trap

gas puffing

giant sawteeth

global Alfvén eigenmodes

global MHD modes

global transport

global warming

Grad-Shavranov shift

Grad-Shavranov equation

Greenwald density

Greenwald limit

gyrotrons

H mode

H mode pedestal

H mode scaling

H mode threshold

H mode transition

H-L transition

halo currents

heat flux exhaust

heat load

heat transport

heavy ion driven inertial fusion

helias reactor

helical system

helicity injection

heliotron

high aspect ratio system

high beta

high confinement modes

high energy ions

high harmonic fast wave

high performance experiments

high power heating experiments

high repetition rate lasers

high Tc superconducting coils

high-Q

high Z wall materials

hohlraum

hybrid electron ion drift mode

hydrogenation

ideal ballooning modes

ignition

Ignitor

imploding plasmas

implosion physics

improved confinement

impurity control

impurity puffing/injection

impurity transport studies

indirect drive

inductive current drive

inertial confinement

ingress-of-coolant event

innovation concepts

instabilities

interchange mode

internal inductance

internal disruptions

internal reconnection event

internal transport

internal transport barriers

International Fusion Materials Irradiation Facility (IFMIF)

intrinsic barrier

in-vessel systems

ion Bernstein wave heating

ion Bernstein waves

ion density

ion dynamics

ion cyclotron resonance heating

ion temperature gradient

ion transport

island divertor

isodynamic conditions

isotope effect

ITER

ITER Canada

ITER France

ITER Japan

ITER Spain

ITER central solenoid

ITER cryopumping system

ITER diagnostics system

ITER divertor

ITER divertor modelling

ITER divertor remote maintenance

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