8th IAEA TECHNICAL MEETING ON CONTROL, DATA ACQUISITION, AND REMOTE PARTICIPATION FOR FUSION RESEARCH

20-24 June 2011

San Francisco, California, United States of America



IAEA

International Atomic Energy Agency

www.iaea.org

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

I. Introduction

The International Atomic Energy Agency (IAEA) will hold the 8th IAEA Technical Meeting (IAEA-TM) on "Control, Data Acquisition, and Remote Participation for Fusion Research in San Francisco, California, United States of America from 20 - 24 June 2011. The meeting will be hosted by the National Ignition Facility at Lawrence Livermore National Laboratory.

Previous meetings were held in Garching, Germany (1997), Lisbon, Portugal (1999), Padova, Italy (2001), San Diego, California, USA (2003), Budapest, Hungary (2005), Inuyama, Japan, (2007) and Aix-en-Provence, France (2009).

II. Objective

The main objective of this meeting is to present and discuss new developments and perspectives in the areas of control, data acquisition, data management and remote participation for nuclear fusion research around the world.

III. Topics

The Meeting will cover the following topics:

- 1) Plasma Control
- 2) Machine Control, Monitoring, Safety and Remote Manipulation
- 3) Data Acquisition and Signal Processing
- 4) Database Techniques for Information Storage and Retrieval
- 5) Advanced Computing and Massive Data Analysis
- 6) Remote Participation and Virtual Laboratory

7) Fast Network Technology and its Application

Special sessions:

- 1) Magnetic Fusion Energy Spotlight (including ITER)
- 2) Inertial Fusion Energy (including NIF)

IV. Format of the Meeting

Presentations

The meeting will include:

- Plenary talks
- Oral presentations
- Poster presentations
- Panels discussions
- Industrial/scientific exhibition

Oral and poster presentations are organized in sessions devoted to dedicated topics such as to foster discussions. All oral papers are also to be presented as posters; in this case a printout of the slides of the oral presentation will be acceptable as poster.

Language

The working language of the meeting is English; no interpretation will be provided.

Ad-hoc Discussions

Time and space will be provided for topical ad-hoc discussion in small groups.

Participants

About 150 experts from IAEA Member States or international organizations are expected to attend the meeting. Participants should be actively involved in the topic of the meeting. Following the standard IAEA procedure, official participants of the meeting must be nominated through their national authorities (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority).

Technical Tours

Technical tours of the National Ignition Facility, the world's largest and highest energy laser will be organized. Participants must register online at http://www.iaea-tm2011.org for the tour no later than **March 23, 2011.**

Satellite Meeting

An MDSplus satellite meeting is planned for Friday afternoon following the meeting, as was done at all previous meetings since 2001.

Industrial and Scientific Exhibition

Industrial and scientific exhibits are expected to be included in the framework of the meeting. In case of interest please consult the local Technical Meeting website at http://www.iaea-tm2011.org.

V. Meeting venue and Transportation

The meeting will take place at the **Westin Market Street Hotel** (50 Third Street, San Francisco, CA 94103, Tel: +1 415 974-6400) in the heart of downtown San Francisco. San Francisco is widely known for combining charm, cuisine, and culture in an extraordinary natural setting. Ride a cable car, see an opera, visit an art museum, or walk through Golden Gate Park while visiting San Francisco. Subject to availability the negotiated group rate at Westin Market Street Hotel will be available until May 18, 2011. Reservations can be made under

http://www.starwoodmeeting.com/StarGroupsWeb/booking/reservation?id=1012083378 &key=D032B.

The National Ignition Facility is located at the Lawrence Livermore National Laboratory, which is about 50 miles east of San Francisco.

Access

Getting there:

There are three major airports in the San Francisco Bay area: San Francisco International, Oakland, and San Jose. BART trains transport travelers from the San Francisco and Oakland airports to downtown San Francisco, for easy access to the **Westin Market Street Hotel**.

Public Transportation:

Driving around San Francisco presents many hazards: steep hills, one-way streets, exorbitant parking fees, and endless traffic congestion. Participants are strongly encouraged to use the city's various forms of public transportation.

VI. Publication

Booklet of Abstracts

The printed abstracts of invited talks and contributed papers will be distributed to the participants at the meeting reception desk.

Electronic Proceedings

Electronic proceedings of the meeting, consisting of slides, posters, or brief versions of the talks, will be made available to all participants on CD after the meeting. These proceedings will also be made available to the participants on restricted-access web pages.

Journal Publication

Publication of a subset of contributions in a refereed journal is planned. Papers from past meetings have been published in special issues of the international journal "Fusion Engineering and Design," published by Elsevier Science.

VII. Participation and Submission of Papers

Participation and Paper Submission Procedure

To participate in the meeting, a completed Participation Form A (PDF, Microsoft Word) must be transmitted to the IAEA through an appropriate authority (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority). Participants wishing to submit a contribution to the meeting will also need to submit a completed form for submission of a paper From B (PDF, Microsoft Word) together with a one-page, text-only abstract of their presentation or poster to their appropriate authority (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority) for subsequent transmission to the IAEA. A participant will only be accepted if the Participation Form is transmitted through the appropriate authority. The forms and abstracts must be received by February 28, 2011. Participants whose nominations have been received by the IAEA will be notified by March 31, 2011.

Individuals who intend to contribute a talk or poster should also send one copy of the IAEA Participation Form, Abstract Submission Form, and abstract to both of the following:

IAEA Scientific Secretary

• Email to: physics@iaea.org
• Fax to: [+43-1-26007]

IAEA-TM2011 Meeting Secretary

• Email to: IAEATM-2011@llnl.gov

• Fax to: [925-424-3295]

Final papers must be submitted as electronic files no later than **June 22, 2011**. Paper copies are discouraged.

Further details about the abstract and final paper will be made available on the local meeting web site.

Expenditures and Financial Support

The costs for the organization of the meeting are borne by the host organization and the IAEA. No registration fee will be charged to participants.

However, to help defray some of the expenses such as hospitality and publication costs, participants are requested to pay a nominal contribution to the local organizer directly upon registration.

As a general rule, the IAEA does not pay travel and accommodation expenses for meeting participants. However, limited funds are available to help meet the cost of attendance of a few selected specialists, primarily those from developing countries with low economic resources.

Generally, no more than one grant will be awarded to any one country. The grants awarded will be in the form of lump sums and usually only cover part of the cost of attendance.

If governments wish to apply for a grant on behalf of one of their specialists, they should address specific requests to the IAEA Scientific Secretary at the IAEA. Governments should ensure that applications for grants:

- Are received by the IAEA by March 13, 2011;
- Are accompanied by a completed and signed Participation Form A (see above), including the abstract of the paper to be presented; and
- Are accompanied by a completed and signed Grant Application Form C (PDF, Microsoft Word), as well as an estimate of a valid travel agent of the flight costs to and from the nearest city or capital city of their country and the conference location.

Applications that do not comply with the conditions mentioned above cannot be considered. Awards will be announced around **April 15, 2011**.

VIII. Visas

Designated participants who require a visa to enter the United States of America should submit the necessary application as soon as possible to the nearest diplomatic or consular representation of their residence. A letter of invitation, if needed, should be requested from the local organizer by emailing IAEATM-2011@llnl.gov.

IX. International Program Advisory Committee

Name	Institute	Country
Karl Behler	Max-Planck-Institut für Plasmaphysik,	Germany
	EURATOM Association	
Thomas Casper	LLNL	USA
Jonathan Farthing	Euratom/UKAEA, Fusion Association	United
		Kingdom
Bernard Guillerminet	CEA/Cadarache,	France
	Association Euratom-CEA	
Larry Lagin	LLNL	USA
Bill McHarg	General Atomics	USA
Yoshio Nagayama	National Institute for Fusion Science	Japan
Osamu Naito	Japan Atomic Energy Agency	Japan
Wanderley Pires de Sa	Institut of Physics	Brazil
Harshad Pujara	Institut for Plasma Research	India
Volker Schmidt	Consorzio RFX-Associazione,	Italy
(guest editor)	EURATOM-ENEA sulla Fusione	
Jorge Sousa	Associação EURATOM/IST,	Portugal
	Centro de Fusão Nuclear	
Joshua Stillerman	MIT-PSFC	USA
(Chairperson)		
Bingjia Xiao	Institute of Plasma Physics,	China
	Chinese Academy of Sciences	

X. Organizing Committee

Richard Kamendje (IAEA Scientific Secretary)	Physics Section Division of Physical and Chemical Sciences International Atomic Energy Agency Vienna International Centre, PO Box 100, A-1400 Vienna, Austria Phone: +43-1-2600-21707, FAX: +43-1-26007
Larry Lagin (Chairperson) Trina Volker Jenessa Huffman	e-mail: physics@iaea.org Lawrence Livermore National Laboratory National Ignition and Photon Science Directorate 7000 East Avenue Livermore, CA 94551
Peg Folta	E-mail: <u>IAEATM-2011@llnl.gov</u>
Tim Frazier	
Bob Demaret	
Kim Jordan	
Irene Dias	

XI. General Contact Information

Please address communications to Meeting Secretary and IAEA Scientific Secretary

Email to: <u>IAEATM-2011@llnl.gov</u> with cc to: <u>physics@iaea.org</u>

XII. Important Date (Deadlines)

Application for Travel Grants (Form C)	March 13, 2011
Submission of Abstracts and Forms A & B	February 28, 2011
Decision on acceptance of Papers	March 31, 2011
Final papers due	June 22, 2011
Meeting begins	June 20, 2011
Files of presentation due	June 20, 2011