



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

14th Technical Meeting on Control Systems, Data Acquisition, Data Management and Remote Participation in Fusion Research

Hosted by the
Government of Brazil

through the
Instituto de Física da Universidade de São Paulo

Rua do Matão, 1371 - Butantã
CEP05508-090 - São Paulo - SP - Brazil

15 – 18 July 2024

Ref. No.: EVT2304137

Information Sheet

Introduction

The International Atomic Energy Agency (IAEA) fosters international collaboration and coordination to help close the existing gaps in physics, technology and safety, and move forward in developing the peaceful use of fusion energy. IAEA's activities in this field cover, among others, plasma physics and fusion energy research, technologies and materials, both for magnetic and inertial confinement fusion. The main objective of fusion technology development is to deliver a safe, economical and essentially unlimited energy source. While considerable progress has been made during the last few years, there is still a great deal of research and development needed; moving from pulsed experimental devices to long-pulse operation with high neutron yields creates increasing computer science and engineering challenges to be solved.

Objectives

The event aims to provide a forum to discuss new developments in the areas of control systems, data management including data acquisition and analysis, and remote participation in fusion research.

Target Audience

The event aims to bring together junior and senior scientific fusion project leaders, plasma physicists, including theoreticians and experimentalists, and experts in the field of plasma control systems, data management including data acquisition and analysis, and remote experiments in fusion research.

Working Language(s)

The working language of the event will be English. All communication and papers must be sent to the IAEA in English. No simultaneous interpretation will be provided.

Structure and Topics

The programme will mainly consist of sessions dedicated to invited and contributed (orals and posters) talks and discussion. A Programme Committee made up of a representative international membership will be responsible for selecting the talks and arranging the technical and discussion sessions, as well as for the overall scientific content of the event.

The sessions will cover the following topics:

- Plasma Control and Simulation
- Machine Control, Monitoring, Safety and Remote Manipulation
- Data Acquisition and Signal Processing
- Machine Learning
- Data Storage and Retrieval, Distribution and Visualization
- Next Step/new fusion devices technologies: Challenges and Opportunities

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (<https://intouchplus.iaea.org>) to the competent national

authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **15 April 2024**, following the registration procedure in InTouch+:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register [here](#).
2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under ‘Complete Profile’ and upload the relevant supporting documents;
 - Search for the relevant event under the ‘My Eligible Events’ tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating Authority’ (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by **15 April 2024**.

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency’s Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA’s scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA’s mandate. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations (oral and poster) are requested to submit an abstract of their work through IAEA-INDICO by **5 April 2024**. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should extend to no more than 1 page (including figures and tables) and should not exceed 500 words.

Submissions must contain the author's name, email address, country, organization and topic. Authors are encouraged to flag their proposals as an oral or poster presentation. However, the Programme Committee will evaluate all submissions and decide on the final presentation format.

Authors will be notified of the acceptance of their proposed presentations by **30 April 2024**.

An electronic copy of the proceedings, consisting of abstracts, presentation slides and posters will be made available to all participants on the IAEA Fusion Portal.

In addition to the registration already submitted through the InTouch+ platform, participants have to submit the abstract to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA not later than **15 April 2024**.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made, together with the submission of the application, by **15 April 2024**.

Venue

The event will be held at the Instituto de Física da Universidade de São Paulo, Brazil.

Participants must make their own travel and accommodation arrangements. For more information, please visit the meeting web page.

Visas

Participants who require a visa to enter Brazil should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of Brazil.

Key Deadlines and Dates

5 April 2024	Deadline for submission of abstracts through IAEA-INDICO for contributed talks
15 April 2024	Deadline for submission of Participation Form (Form A) and Grant Application Form (Form C) (if applicable) through the official channels
30 April 2024	Notification of acceptance of abstracts and of assigned awards
15 July 2024	Event begins
18 July 2024	Event ends

Programme Committee

Mr Joshua Stillerman (Chair)	United States
Mr Didier Mazon (Co-Chair)	France
Mr Wanderley Pires De Sa	Brazil
Mr Bingjia Xiao	China
Mr Min Xu	China
Mr Axel Winter	Germany
Mr Daniel Raju	India
Mr Adriano Luchetta	Italy
Mr Gabriele Manduchi	Italy
Mr Joe Snipes	ITER Organization
Ms Mikyung Park	ITER Organization
Mr Hideya Nakanishi	Japan
Mr Mikhail Sokolov	Russia
Mr Adam Stephen	United Kingdom
Mr David Schissel	United States
Mr Stephen Lane-Walsh	United States

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/Secretaries and correspondence on other matters related to the event to the Administrative Secretary.

Host Organization Contact Point

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São Paulo

BRAZIL

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Event Web Page

Please visit the following IAEA web page regularly for new information regarding this event:

<https://conferences.iaea.org/event/377/>