



Átomos para la paz y el desarrollo

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

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La Secretaría del Organismo Internacional de Energía Atómica (OIEA) saluda a los Estados Miembros del OIEA y tiene el honor de señalar a su atención la celebración de la **13ª Reunión Técnica sobre Sistemas de Control del Plasma, Gestión de Datos y Experimentos a Distancia en la Investigación sobre Fusión** (denominada en adelante el “evento”), que tendrá lugar en Culham (Reino Unido) del **5 al 8 de julio de 2021**.

Además, se podrá participar en el evento de forma virtual a través de Cisco Webex.

La finalidad del evento es proporcionar un foro de discusión sobre los nuevos avances en las esferas de los sistemas de control del plasma, la gestión de datos, incluida la adquisición y el análisis de datos, y los experimentos a distancia en la fusión nuclear.

En la reseña informativa adjunta se ofrecen más detalles sobre el evento.

El evento se celebrará en inglés.

Se invita a los Estados Miembros a designar a una o más personas para que participen en este evento en representación de su Gobierno y se los alienta encarecidamente a que seleccionen con ese fin a mujeres calificadas.

Por lo general, el OIEA no está en condiciones de sufragar los gastos de viaje ni de otra índole de los participantes en el evento. No obstante, dispone de fondos limitados para ayudar a cubrir los gastos de asistencia de determinados participantes. Esa ayuda puede ofrecerse normalmente, previa solicitud expresa, a un participante por país siempre que, en opinión del OIEA, la persona para la que se solicite pueda hacer una contribución importante al evento. La solicitud de apoyo financiero debe presentarse en el momento de la designación de los participantes mediante el formulario de solicitud de subvención adjunto (Formulario C).

Cabe señalar que el OIEA no paga ninguna indemnización por daños o pérdida de efectos personales. Tampoco proporciona seguro médico a los participantes en eventos del OIEA. Por lo tanto, se recomienda que estas personas adopten las medidas necesarias para contratar por su cuenta un seguro privado. No obstante, el OIEA cubrirá mediante un seguro los accidentes y las enfermedades claramente relacionados con los servicios prestados al OIEA.

Las designaciones deben presentarse al OIEA por conducto de la autoridad nacional competente (el Ministerio de Relaciones Exteriores, la Misión Permanente ante el OIEA o la Autoridad Nacional de Energía Atómica), a más tardar el **28 de mayo de 2021**, por medio del formulario de participación adjunto (Formulario A). Los formularios de participación debidamente cumplimentados y autorizados deben enviarse por correo electrónico a la dirección [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) o por fax al número: +43 1 26007 (no se precisan copias impresas). Asimismo, han de enviarse copias por correo electrónico al Secretario Científico del evento, Sr. Matteo Barbarino, División de Ciencias Físicas y Químicas, Departamento de

Ciencias y Aplicaciones Nucleares (correo electrónico: [M.Barbarino@iaea.org](mailto:M.Barbarino@iaea.org)), y a la Secretaria Administrativa, Sra. Rozanne Bojdo (correo electrónico: [R.Bojdo@iaea.org](mailto:R.Bojdo@iaea.org)). Una vez recibidas las designaciones oficiales, el Secretario Científico del evento contactará directamente a los participantes en relación con otras cuestiones de organización, como los detalles del viaje, según proceda.

El OIEA no se hace responsable de virus informáticos, gusanos, troyanos, puertas traseras, temporizadores, relojes, contadores o cualquier otra rutina, instrucción o diseño que limiten el funcionamiento, u otro código no solicitado malicioso, ilícito o similar, incluidos programas de vigilancia o rutinas que puedan permitir a cualquier persona, o por iniciativa propia, el acceso con el objetivo de borrar, o dañar o modificar de cualquier otro modo datos o sistemas, servidores, instalaciones u otra infraestructura del usuario final (colectivamente, “código inhabilitante”). Asimismo, el proveedor de los servicios para la reunión virtual ha asegurado y garantizado que los Servicios no contendrán, ni ningún usuario final recibirá del programa informático empleado para celebrar la reunión virtual, ninguno de estos códigos inhabilitantes.

La Secretaría del Organismo Internacional de Energía Atómica aprovecha esta oportunidad para reiterar a los Estados Miembros del OIEA el testimonio de su distinguida consideración.



26 de febrero de 2021

Documentación adjunta (en inglés únicamente):

Reseña informativa

Formulario de participación (Formulario A)

Formulario de presentación de memorias (Formulario B)

Formulario de solicitud de subvención (Formulario C)



# **13th Technical Meeting on Plasma Control Systems, Data Management and Remote Experiments in Fusion Research**

**Hosted by the**  
Government of United Kingdom

**through the**  
United Kingdom Atomic Energy Authority

**Culham Science Centre**  
**Culham, United Kingdom**

**5–8 July 2021**

**Ref. No.: EVT1904260**

## **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 plasma control systems, data management including data acquisition and analysis, and remote experiments 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**  
Keywords: CODAC Control Systems and its Components, Plasma Control Systems, Advanced Software Approaches
- **Machine Control, Monitoring, Safety and Remote Manipulation**  
Keywords: Equilibrium Condition, Transport Simulation, Fast Simulation, Event System
- **Data Acquisition and Signal Processing**  
Keywords: Diagnostics, Data Processing, Image Processing
- **Database Techniques for Information Storage and Retrieval**  
Keywords: Metadata, Post Data Analysis, Multi-site Repositories, Database System
- **Advanced Computing and Massive Data Analysis**

Keywords: Artificial Intelligence, Deep Learning, Machine Learning, Real-time Diagnostics, Parallel Computing, High Performance Computing, Real-time MHD Analysis

- **Remote Experiments and Virtual Laboratory**

Keywords: Remote Participation, Control Tools, Remote Data Analysis and Visualization

- **Fast Network Technology and its Application**

Keywords: Data Archival and Retrieval, Animation Performance

## 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, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **28 May 2021**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

All persons wishing to present a contribution at the event are requested to send the **Participation Form (Form A)** together with **Form for Submission of a Paper (Form B)** through the established official channels to the IAEA by the above deadline.

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

Please note that the IAEA is in a transition phase to manage the entire registration process for all regular programme events electronically through the new InTouch+ (<https://intouchplus.iaea.org>) facility, which is the improved and expanded successor to the InTouch platform that has been used in recent years for the IAEA's technical cooperation events. Through InTouch+, prospective participants will be able to apply for events and submit all required documents online. National authorities will be able to use InTouch+ to review and approve these applications. Interested parties that would like to use this new facility should write to: [InTouchPlus.Contact-Point@iaea.org](mailto:InTouchPlus.Contact-Point@iaea.org).

## Abstracts and Proceedings

Concise regular contributions (oral and poster presentations) that fall within the topics outlined above may be submitted to the event. Anyone wishing to present a regular contribution at the event is requested to submit an abstract of not more than 500 words through IAEA-INDICO by **7 May 2021**. Abstracts may contain figures and graphics. Instructions on how to upload the abstracts will be available on the IAEA-INDICO website.

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 by email by **7 June 2021** as to whether their abstracts have been accepted.

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.

Under the coordination of the Chair of the Programme Committee, a summary paper will be published in the IAEA journal *Nuclear Fusion*.

## **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 using the **Grant Application Form (Form C)** which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **28 May 2021**.

Grant awards will be announced by **7 June 2021**.

## **Event Venue and Accommodation**

The event will be held at Culham Science Centre, Culham, United Kingdom.

For information about accommodation and transportation please visit the meeting web page.

## **Visas**

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

## **Key Deadlines and Dates**

<b>7 May 2021</b>	Deadline for submission of abstracts through IAEA-INDICO for contributed talks
<b>28 May 2021</b>	Deadline for submission of Participation Form (Form A), Form for Submission of a Paper (Form B) and Grant Application Form (Form C) (if applicable) through the official channels
<b>7 June 2021</b>	Notification of acceptance of abstracts and of assigned awards
<b>5 July 2021</b>	Event begins
<b>8 July 2021</b>	Event ends

## Programme Committee

The Programme Committee is composed of the following members:

Mr John Waterhouse (Chair)	United Kingdom
Ms Sang-hee Hahn	Republic of Korea
Mr Adriano Luchetta	Italy
Mr Didier Mazon	France
Ms Mikyung Park	ITER Organization
Mr Hideya Nakanishi	Japan
Mr Wanderley Pires De Sa	Brazil
Mr Daniel Raju	India
Mr David Schissel	United States
Mr Joe Snipes	ITER Organization
Mr Mikhail Sokolov	Russia
Mr Joshua Stillerman	United States
Mr Axel Winter	Germany
Mr Bingjia Xiao	China

## IAEA Contacts

### Scientific Secretary:

**Mr Matteo Barbarino**

Division of Physical and Chemical Sciences  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 26386

Fax: +43 1 26007

Email: [M.Barbarino@iaea.org](mailto:M.Barbarino@iaea.org)

### Administrative Secretary:

**Ms Rozanne Bojdo**

Division of Physical and Chemical Sciences  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 21754

Fax: +43 1 26007

Email: [R.Bojdo@iaea.org](mailto:R.Bojdo@iaea.org)

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

## Host Organization Contact Point

### Chairperson:

**Mr John Waterhouse**

United Kingdom Atomic Energy Authority  
Culham Science Centre  
ABINGDON  
UNITED KINGDOM

Email: [John.Waterhouse@ukaea.uk](mailto:John.Waterhouse@ukaea.uk)



## **Meeting Web Page**

Participants are encouraged to visit this web page regularly to check for new or updated information regarding the meeting:

<https://conferences.iaea.org/event/244/>



# Participation Form

## 13th Technical Meeting on Plasma Control Systems, Data Management and Remote Experiments in Fusion Research

Culham, United Kingdom

5–8 July 2021

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary [M.Barbarino@iaea.org](mailto:M.Barbarino@iaea.org) and to the Administrative Secretary [R.Bojdo@iaea.org](mailto:R.Bojdo@iaea.org).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

**Deadline for receipt by IAEA through official channels: 28 May 2021**

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable: Do you intend to submit a paper?                      Yes <input type="checkbox"/> No <input type="checkbox"/> Would you prefer to present your paper as a poster?      Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		



# Form for Submission of a Paper

## 13th Technical Meeting on Plasma Control Systems, Data Management and Remote Experiments in Fusion Research

**Culham, United Kingdom**

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Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

**Deadline for receipt by IAEA through official channels: 28 May 2021**

Title of the paper:		
If applicable: Abstract ID in IAEA-INDICO:		
Family name(s) and first name(s) of all author(s) (same as in passport(s):	Scientific establishment(s) in which the work has been carried out	City/Country
1.		
2.		
3.		
Family name(s) and first name(s) of author presenting the paper (same as in passport):	Mr/Ms:	
Mailing address:		
Tel. (Fax):		
Email:		

I hereby agree to assign to the International Atomic Energy Agency (IAEA):

- the copyright; or
- the non-exclusive, worldwide, free-of-charge licence (this option is only for those authors whose parent institution does not allow them to transfer the copyright for work carried out in that institution) granting the IAEA world rights for the use of the aforementioned material in this and any future editions of the publication, in all languages, and in all formats available now, or to be developed in the future (digital formats, hard copy etc.).

**Please note:** If granting the licence mentioned above, please supply any copyright acknowledgement text required.

Furthermore, I herewith declare:

- that the material submitted to the IAEA is original, except for such excerpts from copyrighted works as may be included with the permission of the copyright holders thereof, has been written by the stated authors, has not been published before, and is not under consideration for publication by another entity;
- that any permissions and rights to publish required for third-party content, including but not limited to figures and tables, have been obtained, that all published material is correctly referenced; and
- that the material submitted to the IAEA does not contain any libellous or other unlawful statements and does not contain any materials that violate any personal or proprietary rights of any person or entity.

**Date:**

**Signature of main author:**

# Grant Application Form

## 13th Technical Meeting on Plasma Control Systems, Data Management and Remote Experiments in Fusion Research

Culham, United Kingdom

5–8 July 2021

To be completed by the applicant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary [M.Barbarino@iaea.org](mailto:M.Barbarino@iaea.org) and to the Administrative Secretary [R.Bojdo@iaea.org](mailto:R.Bojdo@iaea.org).

**Deadline for receipt by IAEA through official channels: 28 May 2021**

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:	Tel.:	
	Fax:	
	Email:	
Date of birth (yy/mm/dd):	Nationality:	

### 1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended	
			from	to

### 2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years worked	
			from	to

### 3. Description of work performed over the last three years:

### 4. Institute's/Member State's programme in field of event:

Date:                      Signature of applicant: \_\_\_\_\_

Date:                      Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority \_\_\_\_\_