

Webinars on Nuclear Fusion Research

Participation is free for all interested.
The number of participants is limited to maximum 100.
The full programme is attached below.

The first webinar takes place on
Wednesday 29 September 2021, 16:00

where

**Dr. Julien Hillairet, Directeur de Recherches, Institut de
Recherche sur la Fusion Magnétique, CEA Cadarache, France**

will present

"Introduction to nuclear fusion research"



Dr. Julien Hillairet is an expert in the design and manufacturing of high-power Radiofrequency Heating Systems for fusion devices. He is also specialist in RF antenna/plasma coupling modelling and the developer of the open-source coupling code ALOHA. He was involved in the design of High-Power RF systems for other fusion laboratories in Europe, China, the US, India and Korea. He is also deputy Task Force leader for the WEST tokamak at the Institut de Recherche sur la Fusion par confinement Magnétique at the CEA site in Cadarache, France,

Nuclear fusion is one of the promising options for generating large amounts of carbon-free energy in the future. Fusion is the process that powers the Sun and all other stars, where energy is released by the fusion of light atomic nuclei. Fusion scientists and engineers are developing the technology for use in future power stations. This webinar will introduce the basics of nuclear fusion, and give an overview of magnetic confinement systems, tokamaks and stellarators, and inertial fusion. The challenges for the extrapolation of the experiments of today to future large scale, commercially viable fusion reactors will be discussed.

Connection to the Webinar by Zoom link:

<https://us02web.zoom.us/j/85774373614?pwd=d05mMIJBTmRBN25vck41UHcvU29ldz09>

Meeting ID: 857 7437 3614 Passcode: 925343

The joint BPS-ISI Webinars are held on Wednesday afternoons at 16:00.
Exceptions to this fixed schedule are indicated in **red**
Each presentation lasts about 45 minutes, followed by questions/answers.

Full Programme of the BPS-ISI Joint Webinars on NUCLEAR FUSION RESEARCH

Wednesday 29 September 2021, 16:00

Dr. Julien Hillairet, Directeur de Recherches, Institut de Recherche sur la Fusion Magnetique, CEA Cadarache, France

"Introduction to nuclear fusion research"

Tuesday 5 October 2021, 16:00

Dr. Alberto Loarte, Head of the ITER Science Division, Science, Controls and Operation Department,
ITER Organization, Cadarache, France

"Objectives and status of the ITER project, the first fusion reactor under construction"

Wednesday 13 October 2021, 16:00

Prof. Dr. Thomas Klinger, Director of the Division Stellarator Dynamics and Transport, Director of the Project Wendelstein 7-X, Max Planck
Institute for Plasma Physics, Greifswald, Germany

**"The long way to steady-state fusion plasmas
The superconducting stellarator experiment Wendelstein 7-X"**

Wednesday 20 October 2021, 18:00

Dr. Juan Knaster
Deputy Head of ITER Programme Department, F4E at ITER Organisation, Cadarache, France

"Materials research for fusion: availability of fusion relevant neutron sources"

Wednesday 27 October 2021, 16:00

Prof. Dr. Vladimir Tikhonchuk,
Centre Lasers Intenses et Applications, Université de Bordeaux, France

"Inertial fusion research: physics, status and latest results"

Connection to each of the above Webinars is by Zoom link:
<https://us02web.zoom.us/j/85774373614?pwd=d05mMIJBTmRBN25vck41UHcvU29ldz09>
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