

25th IAEA Fusion Energy Conference - IAEA CN-221



IAEA FEC 2014

Sunday, October 12, 2014 - Saturday, October 18, 2014

Hotel Park Inn Pribaltiyskaya

Scientific Scope

Scope

<div style="text-align: justify;">

With a number of next-step fusion devices currently being implemented — such as the International Thermonuclear Experimental Reactor (ITER) in Cadarache, France, and the National Ignition Facility (NIF) in Livermore, United States of America — and in view of the concomitant need to demonstrate the technological feasibility of fusion power plants as well as the economical viability of this method of energy production, the fusion community is now facing new challenges. The way these challenges are addressed will dictate research orientations in the present and coming decades.</div>

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The scientific scope of FEC 2014 is, therefore, intended to reflect the priorities of this new era in fusion energy research. The conference aims to serve as a platform for sharing the results of research and development efforts in both national and international fusion experiments that have been shaped by these new priorities, and to thereby help in pinpointing worldwide advances in fusion theory, experiments, technology, engineering, safety and socio-economics. Furthermore, the conference will also set these results against the backdrop of the requirements for a net energy producing fusion device and a fusion power plant in general, and will thus help in defining the way forward.</div>

Topics

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Papers on the following topics will be considered for presentation at FEC 2014 if they are clearly relevant to the development of fusion energy (see also the Scientific Guidelines for Authors)</div>

OV - Overviews

EXC - Magnetic Confinement Experiments: Confinement

EXS - Magnetic Confinement Experiments: Stability

**EXW - Magnetic Confinement Experiments:
Wave-plasma interactions; current drive; heating;
energetic particles**

**EXD - Magnetic Confinement Experiments:
Plasma-material interactions; divertors; limiters;
scrape-off layer (SOL)**

**THC - Magnetic Confinement Theory and
Modelling: Confinement**

**THS - Magnetic Confinement Theory and
Modelling: Stability**

**THW - Magnetic Confinement Theory and
Modelling: Wave-plasma interactions; current
drive; heating; energetic particles**

**THD - Magnetic Confinement Theory and
Modelling: Plasma-material interactions; divertors,
limiters, SOL**

PPC - Plasma Overall Performance and Control

ICC - Innovative Confinement Concepts

FIP - Fusion Engineering, Integration and Power Plant Design

FNS - Fusion Nuclear Physics and Technology

MPT - Materials Physics and Technology

SEE - Safety, Environmental and Economic Aspects of Fusion

IFE - Inertial Fusion Experiments and Theory