26th IAEA Fusion Energy Conference - IAEA CN-234

Monday 17 October 2016 - Saturday 22 October 2016

Kyoto International Conference Center

Scientific Scope

Scope

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.

The scientific scope of FEC 2016 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.

Topics

Papers on the following topics will be considered for presentation at FEC 2016 if they are clearly relevant to the development of fusion energy (see also the Scientific Guidelines for Authors)

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

IFE - Inertial Fusion Experiments and Theory

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

Keynote

Keynote Presentation

Summary