

# Plasma Physics and Controlled Fusion

Submission deadline **31 January 2017** 

### iopscience.org/ppcf

### **Call for papers**

Special issue featuring invited papers from the 21st Workshop on MHD Stability Control, addressing prediction and forecasting of transient events, 7–9 November 2016 at General Atomics.

#### **Guest Editor**

Dr Matthew Lanctot General Atomics, USA

#### Your invitation to submit

Plasma Physics and Controlled Fusion™ (PPCF) is delighted to announce that it will be publishing a selection of papers from the 21st Workshop on MHD Stability Control, to be published in mid-2017.

Topics for the meeting: In magnetic confinement devices, prediction of potentially damaging transient events and forecasting of controllability boundaries may be essential elements of a robust plasma control strategy. Predictions from both physical and statistical models based on real-time plasma monitoring and from active probing may provide sufficient warning of unfavorable impending conditions. Combining such predictions with knowledge of plasma response to actuators, such as 3D fields, could enable preemptive active stabilization or modification of the operating point to maintain passive stability. In this workshop, we will discuss recent advances in experiment and theory aimed at sustaining stable, high-performance plasmas through the use of prediction and forecasting strategies. Note: The proposed theme does not exclude contributed talks from relevant areas of MHD stability and control.

Invited and contributed talks are invited to submit. Special issue papers in PPCF can be from 4 to 14 pages (at approx. 900 words per page) in length, including space for figures, graphs and tables (figures are equivalent to about 300 words each). We encourage colour figures and multimedia clips for the online version of the special issue, for which there is no charge. As with our regular submissions, there will be no page charges.

Special issue articles are subject to the same review process, high editorial standards and quality requirements as regular PPCF papers and should be submitted in the same way. Please read the journal scope page for more information before submitting. The issue will be widely promoted to the plasma-physics community, ensuring that your work receives maximum visibility.

#### **Deadline for submissions**

Submissions will be accepted until **31 January 2017.** PPCF is able to publish special issues incrementally, which means that we don't have to wait for all articles submitted to the issue to be ready for publication and publish all articles together. Therefore, if you submit early in the period, your article will not be held up waiting for the final article. Contributions will be gathered together on a dedicated special issue page once they are published online in the journal.

#### How to submit your paper

All articles should be submitted using our online submission form **(www.iop.org/journals/authorsubs)**. In the first step of the online form, under 'Manuscript Type' please select 'Special Issue Article' and select 'Special Issue on the 21st Workshop on MHD Stability Control ' in the 'Select Special Issue' dropdown box.

#### **About PPCF**

Published every month, PPCF has one of the highest Impact Factors in the field (**2.404**, ISI 2015) and covers all aspects of the physics of hot, highly ionized plasmas. This includes results of current experimental and theoretical research on all aspects of the physics of high-temperature plasmas and of controlled nuclear fusion, including the basic phenomena in highly ionized gases in the laboratory, in the ionosphere and in space, in magneticconfinement and inertial confinement fusion, as well as related diagnostic methods.

#### **Further information**

For further information, visit **www.iopscience.org/ppcf** or e-mail the PPCF publishing team at **ppcf@iop.org.** 

Image: Poincare map of the magnetic field lines with ideal plasma response computed by IPEC with lim = 0.97. Broken line indicates the separatrix of the axisymmetric equilibrium. Kimin Kim et al 2015 Plasma Phys. Control. Fusion 57 104002

## **IOP** Publishing | science first