

A BSC' researcher will coordinate key fusion experiments in preparation of ITER

- *Mervi Mantsinen chosen as scientific coordinator for the next experimental campaign at the Joint European Torus (JET) in preparation of ITER*
- *These experiments, carried out within the European fusion research program EUROfusion for Horizon 2020, will begin this fall at Culham Center for Fusion Energy (Great Britain)*

(Barcelona xxx June). – The BSC Senior Researcher Mervi Mantsinen has been selected as one of the scientific coordinators for the next experimental campaign to prepare fusion at ITER. Mantsinen will coordinate one of the two largest experiments planned for 2015-2016 at the Joint European Torus (JET), the biggest and most powerful fusion reactor in the world and is assisting the design and construction of ITER.

The experiment that Mantsinen will coordinate involves 15 experimental run days, approximately 400 fusion plasma discharges and counts with an international team of 75 fusion specialists from different European institutions. These experiments, made with deuterium, are important for the forthcoming flagship campaign, planned for 2017, when JET will use the same fuel expected at ITER, composed of a mixture of deuterium and tritium.

ICREA Professor Dr. Mervi Mantsinen joined Barcelona Supercomputing Center (BSC) in October 2013. At BSC she has set up and leads the fusion group at the Department of Computer Applications in Science and Engineering. Previously, she worked at JET and the Asdex tokamak at the Max-Planck Institute for Plasma Physics in Garching, Germany. Her present research is focused on the numerical modelling of experiments in magnetically confined fusion devices in preparation of ITER operation. Her objective is to enhance modelling capabilities in the field of fusion by code validation and optimization. This research is done within the European fusion research program EUROfusion for Horizon 2020 in close collaboration with ITER, International Tokamak Physics Activity, EUROfusion and the Spanish national fusion laboratory CIEMAT.

About...

ITER is the international nuclear fusion R&D project, which is building the world's largest experimental tokamak nuclear fusion reactor in France. ITER aims to demonstrate that fusion energy is scientifically and technologically feasible.

EUROFUSION is the 'European Consortium for the Development of Fusion Energy' and manages and funds European fusion research activities. The EUROfusion consortium is composed by the member states of the European Union plus Switzerland as associated member.

The Joint European Torus (JET) located at the Culham Centre for Fusion Energy in Oxfordshire, Great Britain. JET is presently the largest and most powerful fusion reactor in the world, studies fusion in conditions approaching those needed for a fusion power plant.

Barcelona Supercomputing Center

Barcelona Supercomputing Center (BSC) is the national supercomputing centre in Spain. BSC specializes in high performance computing (HPC) and its mission is two-fold: to provide infrastructure and supercomputing services to European scientists, and to generate knowledge and technology to transfer to business and society.

BSC is a Severo Ochoa Center of Excellence and a first level hosting member of the European research infrastructure PRACE (Partnership for Advanced Computing in Europe). The center also manages the Spanish Supercomputing Network (RES).

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