

# JET Upgraded Diagnostic Capabilities and Scientific Exploitation in Support of Deuterium-Tritium Operation

*Friday 26 October 2018 08:30 (4 hours)*

JET upcoming deuterium-tritium campaign, DTE2, is scheduled to take place before the end of 2020. From a point of view of diagnostics developments, for many years JET diagnostics have been upgraded in order to provide adequate support for the scientific exploitation of a D-T campaign, with particular attention to the experimental and operational conditions expected during deuterium-tritium campaigns. Diagnostic capabilities relevant for burning plasmas conditions have been specifically targeted with the focus mainly on fast ions, instabilities, neutron, gamma, ion temperature and operations support. JET diagnostic capabilities and obtained experimental results relevant for the scientific exploitation of the upcoming DT operations are discussed.

This work has been carried out within the framework of the EUROfusion Consortium and has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 633053. The views and opinions expressed herein do not necessarily reflect those of the European Commission.

## Country or International Organization

Portugal

## Paper Number

FIP/P7-42

**Author:** Dr FIGUEIREDO, Joao (EuFusionUk and PtIPFN)

**Co-authors:** Dr MURARI, Andrea (EuFusionUk and ItRFX); Dr SILVA, Antonio (PtIPFN); Dr TÁL, Balázs (HuWigner); Dr MAROCCO, Daniele (ItENEAFSN); Dr BELLI, Francesco (ItENEAFSN); Dr BALBOA, Itziar (UkCCFE); Dr CARVALHO, Ivo (PtIPFN); Dr ZYCHOR, Izabella (PoNCBJ); Dr BERNARDO, Joao (PtIPFN and JET Exploitation Unit, UkCSC); Dr GARCIA-MUNOZ, Manuel (EsUSeville); Dr TARDOCCHI, Marco (ItIFP); Dr HAWKES, Nick (UkCCFE); Dr BLANCHARD, Patrick (ChCRPP); Dr CHRISTIAN, Perez Von Thun (EuFusionUk and DeFJ); Dr CRACIUNESCU, Teddy (RoINFLPR); Dr KIPTILY, Vasili (UkCCFE)

**Presenter:** Dr FIGUEIREDO, Joao (EuFusionUk and PtIPFN)

**Session Classification:** P7 Posters

**Track Classification:** FIP - Fusion Engineering, Integration and Power Plant Design