

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

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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.

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