Abstract Submitted
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Initial results from shattered pellet injection disruption mitigation research on JET[1] L.R. BAYLOR, ORNL, JET SPI TEAM AND JET CONTRIBUTORS* COLLABORATION — A Shattered Pellet Injector system has been installed on JET as a collaboration between the DOE, ITER Organization, and Euratom. The system has become operational in the present JET C38 campaign and is being used to investigate mitigation of disruption thermal and EM loads, radiation asymmetry during thermal mitigation, and runaway electron (RE) formation and dissipation. The system has capabilities to inject pellets of D2 and neon mixtures or argon. Scans of pellet neon content show possible saturation of radiated power above 50% and peak power levels above 4 GW. The dissipation of RE current has been observed with Ar and Ne injection. Highlights of results will be presented. *See the author list of E. Joffrin *et al* 2019 *Nucl. Fusion* 59 112021. Work supported by the US DOE under contract DE-AC05-00OR22725 and by the ITER Organization (TA C18TD38FU) and carried out within the framework of the EUROfusion Consortium, receiving funding from the Euratom research and training programme 2014-2018 and 2019-2020 under grant agreement No 633053. The views and opinions expressed herein do not necessarily reflect those of the European Commission.

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