Abstract Submitted
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New lost alpha diagnostics for JET EDWARD CECIL, Colorado School of Mines, DOUG DARROW, BOB ELLIS, Princeton Plasma Physics Lab, VASILI KIPTILY, LES PEDRICK, EFDA-JET, MATTHIUS REICH, ANDREAS WERNER, STEFAN BEAUMEL, Max Planck Institute fur Plasma Physics — Two new devices have been installed in the JET vacuum vessel near the plasma boundary to investigate the loss of energetic fusion products in general and alpha particles in particular during the up coming JET experiments. These devices are (i) a well collimated scintillator which is optically coupled to a charge coupled device and (ii) a set of multichannel thin foil Faraday collectors. Both devices have been designed to withstand the harsh radiation, thermal, and mechanical stresses of the near plasma environment. The design and operating principles of these devices have been discussed elsewhere [1,2], Photography of the devices as installed and preliminary operation during plasma commissioning pulses will be presented. This work is supported by US DOE contracts DE-AC02-76CH33073 and DE-FG03-95ER54303 and is conducted under EFDA by IPP and PPPL. 1. S. Beaumel et al. Rev Sci Instruments **75**, 3563 (2004) 2. D.S. Darrow et al. Rev Sci Instruments **75**, 3566 (2004)

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