Abstract Submitted
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Expanded Capability of the Edge CXRS System on JET[1] T.M. BIEWER, D.L. HILLIS, ORNL, Y. ANDREW, N.C. HAWKES, K.-D. ZASTROW, EURATOM/UKAEA, K. CROMBE, EURATOM, Belgium, C. STREGE, Jacobs Univ., JET EFDA TEAM[2] — A new instrument has been added to the Joint European Torus (JET) edge charge-exchange recombination spectroscopy (CXRS) suite of diagnostics. The new instrument consists of a short focal length spectrometer coupled to a fast framing CCD camera. With the addition of this instrument, the number of sightlines is increased by 20 to a total of 58 views. The radial range of the edge CXRS system extends from $r/a \sim 0.5$ to ~ 1.0. The time resolution of this instrument is improved to 10 ms. This diagnostic observes simultaneously the neutral-beam induced charge-exchange emission of C VI at 529.1 nm and of Ne X at 524.8 nm, complementing the existing edge CXRS instruments, which can be tuned to observe any visible wavelength of interest. An overview of the CXRS diagnostic system on JET will be presented. Preliminary data will be shown from the current JET campaign.

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[2]M.L. Watkins, et al., Fusion Energy 2006 (Proc. 21st Int. Conf. Chengdu, 2006) IAEA, (2006)

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