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[ ] Theory [X] Experiment

**Carbon Ion Flow Measurements in DIII-D Divertors Using Coherence Imaging Spectroscopy,\*** S.L. Allen, W.H. Meyer, G.D. Porter, *LLNL*; J. Howard, *The Australian National University* — New, single-crystal imaging interferometers along with improved relay optics have been installed in the upper and lower DIII-D divertors. These provide improved images of the Doppler shift and thereby flow of CIII (465 nm) ions. An improved in-situ calibration technique has been implemented, providing zero velocity reference images and measured spectrometer phase vs wavelength. The temperature resolution of the system has been greatly improved, resulting in a stable wavelength calibration. Image intensified cameras have made possible measurements of flow during ELMS and in the non-active divertor. Streamlined data analysis has been used to look for flow trends. In general, we see flow in opposite directions on the inner and outer scrape-off layers in the divertor.

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