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PEM029-P17 Room: Convention Hall Time: May 26 17:15-18:45

Velocity Fields nearby Magnetic Reconnection Regions in an EUV Emission-line Spectroscopy

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We report observational properties in the impulsive phase of a long duration flare on 2007 May 19 from spectroscopic observations with the Hinode EUV imaging spectrometer (EIS) with supplemental observations of Hinode SOT & XRT, TRACE, and RHESSI. We have found an isolated hot source showing a largely enhanced nonthermal line broadening, a fast jet nearby, and an inflow structure to the hot source. Magnetic reconnection occurring above the loop-top region of the flare loop can account for these observations.

Keywords: Sun, Flare, Magnetic Reconnection