Doppler-shifted flare emissions observed by SDO/EVE

The EUV Variability Experiment (EVE) onboard the Solar Dynamics Observatory (SDO) has been obtaining unprecedented observations of solar variation on times scales of seconds during flares and over the rising phase of Solar Cycle 24 since its start of normal operations in May 2010. Unexpectedly, as first pointed out in Hudson et. al., *Ap. J.* (2011), even with EVE's spectral resolution of 0.1 nm and 'irradiance' measurements, EVE has the ability to very accurately determine Doppler shifts in all emissions during solar flares and coronal mass ejections (CMEs). The technique for deriving these absolute velocities is not straightforward, as the optical and instrumental effects must first be eliminated in order to separate the absolute plasma velocities from the instrument effects. This talk will discuss these efforts to eliminate the instrumental component, as well as show some of the first results of absolute velocities of multiple emissions at a wide range of temperatures during solar flares.