

**THE PRODUCTION OF STRONG BROAD He II EMISSION  
AFTER THE TIDAL DISRUPTION OF A MAIN-SEQUENCE  
STAR BY A SUPERMASSIVE BLACK HOLE**

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The tidal disruption event (TDE) PS1-10jh lacked strong Balmer lines but showed strong, broad, He II emission both before maximum light and for at least 8 months thereafter. Gezari et al. (2012) interpreted this as evidence for the disruption of a rare hydrogen-deficient star. However, Guillochon et al. (2014) have argued instead that the disrupted star was a normal main-sequence star and that the strength of the He II emission compared with the Balmer lines is a result the emission being similar to the broad-line region (BLR) of an AGN, but lacking the outer, lower-ionization BLR gas. We show that the profile of He II  $\lambda 4686$  in PS1-10jh is similar to the blueshifted profiles of high-ionization lines in AGNs. The similarity of the He II  $\lambda 4686$  emission in PS1-10jh to the emission from the inner BLRs of AGNs supports the idea that the emission after a TDE event is similar to that of normal AGNs.