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Title: Bridging the habitable gap: Combining Kepler and AFTA-WFIRST to obtain a more robust estimate of  $\eta_{\text{Earth}}$   
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One of the primary goals of the Kepler mission is to determine the frequency of habitable terrestrial planets around Sun-like stars ( $\eta_{\text{Earth}}$ ). While there have already been estimates of the frequency of habitable planets orbiting M-dwarfs, the longer periods and larger-than-expected activity intrinsic stellar variability may make the estimate of  $\eta_{\text{Earth}}$  for Sun-like stars substantially more uncertain. The gravitational microlensing survey of the AFTA-WFIRST mission will complement Kepler's search for warm and hot planets by characterizing the frequency of cold planets. While the majority of the hosts of the microlensing survey will be low-mass stars, AFTA-WFIRST is most sensitive to habitable planets around the Sun-like hosts. I will introduce the microlensing survey of AFTA-WFIRST, and then focus on its ability to detect habitable planets and its synergies with Kepler. Specifically, I will discuss how results on the abundances of planets from Kepler and AFTA-WFIRST might be combined to interpolate into the habitable zone and thus obtain a more robust measurement of  $\eta_{\text{Earth}}$ .