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Title: Sizing Up the Stars & Planet Hunters "100,000 Eyes" Guest Scientist Program

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Abstract: Co-Authors: Kaspar von Braun, Gerard van Belle, Debra Fischer, Ji Wang, Joey Schmitt, Matt Giguere,

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We present results associated with ongoing surveys to measure diameters and temperatures of main-sequence stars with long-baseline optical/infrared interferometry. Empirical data such as these are used to calibrate less direct relationships to extend our knowledge to a large number of stars. Analysis includes relations linking color-temperature/radius/luminosity, surface brightness, as well as the global physical properties of temperature-radius-luminosity. The data are also used to identify weaknesses in stellar atmosphere and evolutionary modeling as well as provide empirical constraints to aid in the development of new models.

We will also highlight recent results from the Planet Hunters citizen science project (www.planethunters.org) where volunteers from the general public classify light curves and discover transiting exoplanets using archive data from the Kepler space telescope. We introduce the opportunity for the community to collaborate through the Planet Hunters 'guest scientist' program. In such a framework, guest scientists make requests for the public to collect particular light curves, such as signatures of moons or rings, pulsators, variable stars, flare stars, cataclysmic variables, or microlensing events.