

Abstract Submitted
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Interferometric Imaging of Eclipsing Binaries¹ ROBERT STEN-
CEL, University of Denver — Multi-telescope interferometry has resulted in new
horizons for near-infrared nano-radian imaging and spectro-interferometry (S-I).
The CHARA Array has been increasingly productive, with the advent of MIRC
and VEGA beam combiners, and the Magdalena Ridge Observatory Interferometer
(MROI) holds similar promise. VLTI, NPOI and LBTI are discussed elsewhere. In
this talk, I wish to highlight recent CHARA results on several eclipsing binary stars,
and extend the prospects to a larger set of interacting binaries that can better reveal
processes of mass loss, mass transfer and accretion disk physics. Stars imaged at
high resolution in this manner include: the interacting hot stars in beta Lyr (Zhao+
arxiv.org/abs/0808.0932), the transiting disk in the epsilon Aurigae system (Klop-
penborg+ arxiv.org/abs/1004.2464) and the famous “Demon Star” - Algol (Baron+
arxiv.org/abs/1205.0754). Epsilon Aurigae and its disk have also been studied with
the VEGA S-I combiner (Mourard et al. 2012). The frontier for similar interferomet-
ric studies includes the next echelon of fainter eclipsing systems accessible to MROI,
such as the symbiotic binaries which include white dwarf stars and are considered
as possible precursors of cosmologically interesting Type Ia supernovae.

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