

Extreme-mass-ratio solar-type binaries and their implications for cluster environs

R. G. Samec,¹ Christa M. Labadorf,¹ E. R. Figg,¹ Trevor S. Loflin,¹
Gregory R. Behn,¹ Nathan A. Hawkins,¹ Heather A. Chamberlain,¹
D. R. Faulkner² and W. Van Hamme³

¹Astronomy Group, Physics and Engineering Department, Bob Jones University,
1700 Wade Hampton Boulevard, Greenville, SC 29614, USA

²University of South Carolina, Lancaster, 476 Hubbard Dr., Lancaster, SC 29720, USA

³Physics Department, Florida International University, 11200 SW 8th St.,
Miami, FL 33199, USA

Abstract. During the past decade, the number known shallow-amplitude, yet totally eclipsing, extreme-mass-ratio binaries has increased from one (AW UMa, which is now in doubt) to about a dozen. Statistics are accumulating that will tell us the nature of these once rare systems. These individual interacting field binaries are believed to be the progenitors of FK Comae-type fast-rotating subgiants, which are similar to the cluster stars called ‘variable blue stragglers.’ We review our recent observations and new analyses of the individual systems, V409 Hya, GSC 1283 0053 Ori, GSC 2537 520 CVn, using the 2007 Wilson Code and summarize results from our previous observations (V802 Aql, V902 Sgr) and those from the literature (e.g., CK Boo, GR Vir, HV Aqr, UY UMa, EM Pis, CU Tau, TV Mus) to disclose a preliminary picture of the character of this interesting class of binary stars.

Keywords. magnetic fields, binaries: eclipsing, blue stragglers

The full poster (in pdf format) is available at
<http://www.astro.iag.usp.br/~iaus266/Posters/pSamec.pdf>.

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