

Blue stragglers in star clusters and the conventional SSP models

Yu Xin,¹ Richard de Grijs,^{2,3} Licai Deng³ and Pavel Kroupa¹

¹Argelander Institute for Astronomy, University of Bonn, Bonn, Germany

²Department of Physics and Astronomy, University of Sheffield, Sheffield, UK

³National Astronomical Observatories, Chinese Academy of Sciences, Beijing, China

Abstract. The presence of blue straggler stars (BSs) as secure members of star clusters poses a major challenge to the conventional picture of simple stellar population (SSP) models. The models are based on the stellar evolution theory of single stars, while the major formation mechanisms of BSs are all correlated with stellar interactions. Based on a sufficient working sample including 100 Galactic open clusters, one Galactic globular cluster, and seven Magellanic Cloud star clusters, we discuss the modifications of the properties of broad-band colors and Lick indices of the standard SSP models due to BS populations.

Keywords. blue stragglers, galaxies: star clusters

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