Completeness of sample for faint reddened stars

Christian Boily^{*1}

¹Université de Strasbourg – Observatoire Astronomique de Strasbourg – France

Abstract

Star forming regions are plagued with reddedning and uncertainties in proper motion and distance that become significant already at the distance of Orion ($_~400 \text{ pc}$) even in the GaiaDR2 era. In this short presentation I would like to present a study of an assessment of completeness of sample using E(B-V) maps such as the PAN-STARRS cube. Using the randomness of Fourier modes and age uncertainties for the embedded stars, I find that \approx 20% of stars may yet be missing.

Keywords: stars, multiple stars, extinction maps, ISM

*Speaker