

The GALANTE Photometric Project: First results and the MUDEHaR extension.

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Abstract

GALANTE is an optical (3000-9000 Å) photometric survey with seven intermediate/narrow filters that has been covering the northern Galactic Plane and some adjacent regions since 2016 using the Javalambre T80 telescope (P.I.s Emilio J. Alfaro & Jesús Maíz Apellániz). Originally designed to identify the majority of the early-type massive stars within several kpc of the Sun –including extinction characteristics– its data will be also used for a variety of other stellar studies and the generation of a high-resolution map of the H α emission.

As of early 2022, the observations are almost complete resulting in over 300 astronomical fields, and the first Data Release including 20 fields of 2 deg² is now available. The results show a photometric dynamic range comparable to that of Gaia, reaching a 1% accuracy and precision for stars brighter than AB magnitude 17, and the detection of many fainter stars. In this contribution, I present results of our test fields and a brief summary of the MUDEHaR project, a multi-epoch photometric survey complementary to GALANTE, proposed as the next long-term survey at the Javalambre facilities.