

GALANTE: finding all the optically accessible Galactic O+B+WR stars in the Galactic Plane

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GALANTE is an optical photometric survey with seven intermediate/narrow filters that has been covering the Galactic Plane since 2016 using the Javalambre T80 and Cerro Tololo T80S telescopes. The P.I.s of the northern part (GALANTE NORTE) are Emilio J. Alfaro and Jesús Maíz-Apellániz. and the P.I. of the southern part (GALANTE SUR) is Rodolfo H. Barbáji. The detector has a continuous 1.4 deg x 1.4 deg field of view with a sampling of 0.55"/pixel and the seven filters are optimized to detect obscured early-type stars. The survey includes long, intermediate, short, and ultrashort exposure times to reach a dynamical range close to 20 magnitudes, something never achieved for such an optical project before. The characteristics of GALANTE allow for a new type of calibration scheme using external Gaia, Tycho-2, and 2MASS data that has already led to a reanalysis of the sensitivity of the Gaia G filter. We describe the project and present some early results. GALANTE will identify the majority of the early-type massive stars within several kpc of the Sun and measure their amount and type of extinction. It will also map the H α nebular emission, identify emission-line stars, and do other studies of low- and intermediate-mass stars.

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Comments:

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