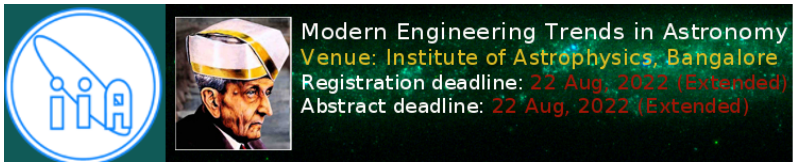

Contribution ID: **46** Type: **not specified**

Astrometric and photometric standard candidates for the upcoming 4-m ILMT survey

The International Liquid Mirror Telescope (ILMT) is a 4-meter class survey telescope that has recently achieved first light and is expected to swing into full operations by 1st January 2023. It scans the sky in a fixed 22′ wide strip centered at the declination of 29°21′41′′ and works in Time Delay Integration (TDI) mode. We present a full catalog of sources in the ILMT strip that can serve as astrometric calibrators. The characteristics of the sources for astrometric calibration are extracted from Gaia EDR3 as it provides a very precise measurement of astrometric properties such as RA (α), Dec (δ), parallax (π), and proper motions ($\mu\alpha*$ & μδ). We have crossmatched the Gaia EDR3 with SDSS DR17 and PanSTARRS-1 (PS1) and supplemented the catalog with apparent magnitudes of these sources in g, r, and i filters. We also present a catalog of spectroscopically confirmed white dwarfs with SDSS magnitudes that may serve as photometric calibrators. The catalogs generated are stored in a SQLite database for query-based access. We also report the offsets in equatorial positions compared to Gaia for an astrometrically calibrated TDI frame observed with the ILMT.

Presentation type

Poster

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