

## Newly mapped large-scale structures along the SARA0 MeerKAT Galactic Plane Survey

Wednesday 5 February 2025 11:00 (20 minutes)

The deep SARA0 MeerKAT Galactic Plane Survey (SMGPS) covers the whole southern Milky Way along a narrow strip of  $\Delta l \sim 3^\circ$ . While primarily aimed at exploring the inner Galaxy, the SMGPS provides a unique opportunity to trace the large-scale distribution of galaxies from their redshifted HI-line emission. Thanks to the excellent resolution and sensitivity of the SMGPS (rms = 0.30-0.60 mJy/beam), the HI-survey is sensitive to  $9.6 \times 10^9 M_\odot$  galaxies throughout the probed volume of  $cz < 25,000$  km/s, encompassing the full distance range relevant to bulk flow, and at the GA distance to galaxies of  $10^8 M_\odot$ .

To date, 2300 HI-galaxies were detected along longitude range  $55^\circ < l < 260^\circ$ , of which only 119 were previously identified in HIZOA. I will present results on the Local Void, its extent and population, the continuation of the OphSCL across the ZOA, the surprising prominence of the GA-Wall in the inner Zone of Avoidance, as well as a newly uncovered structure in close proximity to the GA. New insights into the Vela SCL will be presented by S. Rajohnson.

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