

The Fourth National Workshop on the SKA Project



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Exploring new SHORES

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The Serendipitous H-ATLAS fields Observations of Radio Extragalactic Sources (SHORES), led by Principal Investigator Marcella Massardi, is a 2.1 GHz radio survey conducted with the Australia Telescope Compact Array (ATCA). Spanning 30 fields, totalling 15 square degrees in the Herschel-ATLAS Southern Galactic Pole region, SHORES achieves a sensitivity of up to $50 \mu\text{Jy}$ at 5σ in the SHORES Deep Field. Notably, this field has also been probed at 5.5, 9, and 20 GHz.

This survey is a valuable resource for preparations ahead of forthcoming SKAO observations. Furthermore, SHORES fields have the advantage of multiwavelength ancillary coverage including Herschel far-IR data (H-ATLAS sgp), mid-infrared data (e.g. Spitzer), optical data (e.g. HST) and ASKAP observations. Moreover, SHORES has been observed in polarization, presenting a unique opportunity to investigate polarization properties within radio-loud AGN, star-forming galaxies, and radio-quiet AGN. Our study of galaxy populations in both total intensity and polarization holds significant implications for cosmology, particularly with regard to the influence of AGN and star-forming galaxies on foreground contamination in the Cosmic Microwave Background (CMB) at smaller angular scales.

Research area

Extragalactic Continuum (galaxies/AGN, galaxy clusters)

Primary authors: LAPI, Andrea (Istituto Nazionale di Astrofisica (INAF)); MASSARDI, Marcella (Istituto Nazionale di Astrofisica (INAF)); BEHIRI, Meriem (SISSA); GALLUZZI, Vincenzo (Istituto Nazionale di Astrofisica (INAF))

Co-authors: GENTILE, Fabrizio (Istituto Nazionale di Astrofisica (INAF)); TALIA, Margherita; Ms GIULIETTI, Marika (International School of Advanced Studies (SISSA)); D'AMATO, Quirino (Scuola Internazionale Superiore di Studi Avanzati (SISSA)); RONCONI, Tommaso (Scuola Internazionale Superiore di Studi Avanzati (SISSA), Istituto Nazionale di Astrofisica (INAF))

Presenter: GALLUZZI, Vincenzo (Istituto Nazionale di Astrofisica (INAF))

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