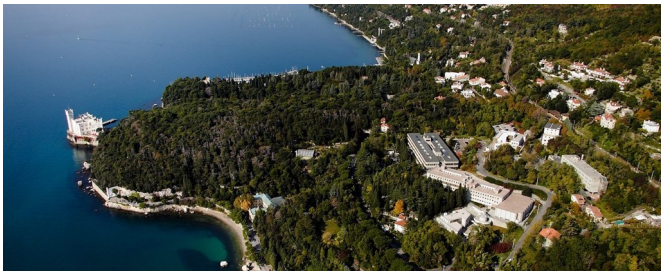

Contribution ID: **96** Type: **not specified**

Tuning the radio to cosmology

Monday 28 August 2023 15:00 (25 minutes)

Serendipitous H-ATLAS fields Observations of Radio Extragalactic Sources (SHORES, PI: Marcella Massardi) is a brand new survey 2.1 GHz performed with the Australia Telescope Compact Array (ATCA). It comprises 30 discontinuous fields covering a total area of 15 sq. deg in the Herschel-ATLAS Southern Galactic Pole region (see Eales+2010), centred in candidate lensed galaxies (Negrello+14). With more than 200 hours of observing time, we reached 30μJy sensitivities. These fields have the perks of being covered by Herschel observations (H-ATLAS sgp) and many other surveys (KIDS, SDSS„ DES...). We have also observed all the SHORES fields in polarization, taking advantage of the presence of polarized calibrators and the high amount of observational time we got. Combined with the sensitivity reached, this gives us the unique opportunity to study the polarisation properties of radio-loud AGN, star-forming galaxies, and radio-quiet AGN. Further, retrieving the galaxy populations in total intensity and polarization in such a wide sky area also impacts cosmology: AGN and star-forming galaxies dominate the CMB foreground on the smaller angular scales.

Presenter: BEHIRI, Meriem

Session Classification: Parallel