



Contribution ID: 30

Type: **Oral contribution**

## How radio observations can support ASTRI Mini-Array Galactic science

*Tuesday, 6 September 2022 16:30 (20 minutes)*

Both radio and gamma astronomy are about to hugely profit from new and upcoming instruments. SKA and CTA precursors and pathfinder are going to give us an unprecedented view of our Galaxy in the two most extreme parts of the electromagnetic spectrum. Supernova remnants (SNRs) are emblematic sources where the radio emission mirrors the energy distribution of the accelerated particles.

In this talk, I present some results of Galactic surveys with the SKA precursors. I will bring examples of how the analysis of these radio data is giving hints on the emission mechanisms taking place in SNRs (spectral breaks, spinning dust, spatial spectral variations) and how these results may be exploited with follow-up gamma studies. The aim is to show how radio and gamma can work synergistically and stimulate new discussions and collaborations.

I finally focus on the case study of Kes73, a known radio and TeV SNR. We show our current and past radio studies on this object and the possibility to have this source as a target for the ASTRI Mini-Array, which consists of nine dual-mirror Cherenkov telescopes currently being built at the Observatorio del Teide (Spain).

### Collaboration

On behalf of the ASTRI Project (<http://www.astri.inaf.it/en/library/>)

**Primary author:** INGALLINERA, Adriano (Istituto Nazionale di Astrofisica (INAF))

**Co-authors:** UMANA, Grazia Maria Gloria (Istituto Nazionale di Astrofisica (INAF)); VERCELLONE, Stefano (Istituto Nazionale di Astrofisica (INAF)); PARESCHI, Giovanni (Istituto Nazionale di Astrofisica (INAF))

**Presenter:** INGALLINERA, Adriano (Istituto Nazionale di Astrofisica (INAF))

**Session Classification:** Galactic Astrophysical Accelerators