

POLarization Sky Survey of the Universe's Magnetism

Tuesday, 7 May 2024 09:25 (15 minutes)

The POLarization Sky Survey of the Universe's Magnetism (POSSUM) is ASKAP's large continuum polarization survey, mapping the diffuse polarization of the southern sky in amazing detail and cataloging polarized radio sources and their Faraday rotation. We expect to achieve a 1.5 order of magnitude leap in the sky density of polarized sources compared to currently available data, and a similar improvement in the typical measurement uncertainty.

Since the last SPARCS meeting, POSSUM has reached two exciting milestones: survey observations have begun and the survey pipelines are processing data. I will present the design and status of POSSUM, show off a few early results, and highlight some novel things we're trying to advance survey science. Time permitting, I'll also talk about the data pipeline design, the lessons learned building it, and the implications for SKA-era surveys.

keywords

survey overview, polarization, ASKAP, pipelines

In-person or online?

in-person

Career level

ECR

Primary author: VAN ECK, Cameron (Australian National University)

Presenter: VAN ECK, Cameron (Australian National University)

Session Classification: Surveys