

Polarization Calibration in LOFAR Beamformed Data

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LOFAR's beamformed mode enables diverse science cases and data collected in this mode proved to be fundamental for the latest EPTA data release, DR2low (Iraci and Chalumeau et al 2025).

However, polarization analysis in beamformed mode has remained largely out of reach due to the absence of a reliable polarization calibration framework.

Here, I will present our cutting-edge polarization calibration scheme specifically tailored for LOFAR's beamformed mode. This work faces a number of calibration challenges, and indicates the pitfalls of the currently-used beam model, but also serves as a stepping stone towards a robust polarization calibration for SKA Low.

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