

**DFG Research Unit
Project A9**

**Commissioning and Pilot
Observations**



A9 members

- Rainer Beck, MPIfR (PI)
- James Anderson, MPIfR (Technical PI)
- Andreas Horneffer, MPIfR (Postdoc)
- Carlos Sotomajor, AIRUB (PhD)
- Alice di Vincenzo, TLS (PhD)

A9 tasks

- Find calibrators for polarization (MPIfR)
- Determine Müller matrix parameters for full station beams (AIRUB)
- Measure total electron content (TEC) and Faraday rotation of ionosphere (TLS, MPIfR)
- Test dynamic range in TP and PI for deep fields (AIRUB)
- Test instrument response to extended sources (AIRUB)
- Test polarization observations with long baselines (TLS, MPIfR)
- Stand-alone mode for polarization observations (MPIfR)
- Optimize frequency resolution and subband selection for RM Synthesis (MPIfR)
- Pilot observations: Effelsberg, Westerbork, GMRT

Submitted MKSP commissioning projects

- Polarized pulsar catalog survey
- RM Synthesis subband optimization: pulsars
- RM Synthesis software testing
- RM Synthesis subband optimization: Fan Region
- RM Synthesis software testing
- Long baseline pulsar calibrator survey
- RM Synthesis software testing
- Jupiter circular polarization
- RM Synthesis subband optimization: AGN
- Long Baseline MS³

Pilot observations

- Westerbork: Edge-on galaxies M82 and NGC891 (AIRUB)
- Westerbork: Face-on galaxy M101 (MPIfR, AIRUB)
- Westerbork: Edge-on galaxy NGC4631 (AIRUB, MPIfR)
- Westerbork: Dwarf galaxies (AIfA)
- Westerbork: M31 (MPIfR, ASTRON)
- Effelsberg: 8-channel polarimetry of M31 (MPIfR)
- GMRT: Polarization test observations (MPIfR, ?)
- EVLA: Survey of edge-on galaxies (International)