

IMAGE: SARA0/NASA

GLOW COUNCIL MEETING,
NOVEMBER 2021

D-MEERKAT II

DOMINIK J SCHWARZ (BIELEFELD)

SUPPORTED BY



Bundesministerium
für Bildung
und Forschung

D-MEERKAT-II: SUPPORTED BY BMBF ERUM-PRO 7/2020-6/2023

- ▶ Partners: U Bielefeld, RU Bochum, TU Dortmund, U Hamburg, RKU Heidelberg, LMU München, TU München
- ▶ Associated partners: MPIfR Bonn, MPA Garching, FZ Jülich - JSC, TLS Tautenburg
- ▶ GLOW-MeerKAT partners (no BMBF funding): U Bonn, H Bonn-Rhein-Sieg, U Würzburg
- ▶ Coordination: Mayumi Sato & Dominik Schwarz (Bielefeld)

D-MEERKAT-II

FIVE FUNDED WORK PACKAGES

D-MeerKAT-II

*A German Contribution to
the Advancement of Radio Astronomy
at Centimetre Wavelengths*



Project Proposal

submitted to PT.DESY

responding to project call "Universum" of frame programme
"Erforschung von Universum und Materie – ErUM" 2020 – 2023

Applicants:

Universität Bielefeld (UBI) – **Coordinating Institution**
Ruhr-Universität Bochum (RUB)
Rheinische Friedrich-Wilhelms-Universität Bonn (UBN)
Hochschule Bonn-Rhein-Sieg (HBRS)
Technische Universität Dortmund (TUDO)

Universität Hamburg (UHH)
Ruprecht-Karls-Universität Heidelberg (ZAH)
Ludwig-Maximilians-Universität München (LMU)
Technische Universität München (TUM)
Thüringer Landessternwarte Tautenburg (TLS)
Julius-Maximilians-Universität Würzburg (JMU)

Prof. Dr. Dominik Schwarz
Prof. Dr. Ralf-Jürgen Dettmar
Dr. Kaustuv Basu
Prof. Dr. André Hinkenjann
Dr. Dominik Elsässer &
Prof. Dr. Dr. Wolfgang Rhode
JProf. Dr. Francesco de Gasperin
Prof. Dr. Stefan Wagner
Prof. Dr. Joseph Mohr
Prof. Dr. Rüdiger Westermann
Dr. Matthias Hoeft
Prof. Dr. Matthias Kadler

Associated Partners:

Max-Planck-Institut für Radioastronomie, Bonn (MPIfR)
Max-Planck-Institut für Astrophysik, Garching (MPA)
Forschungszentrum Jülich GmbH (FZJ)

Dr. Hans-Rainer Klöckner
PD Dr. Torsten Enßlin
Dr. Thomas Fieseler

Information on [D-MeerKAT \(2017-2020\)](#) and on the South African [MeerKAT Radio Telescope \(SARAO\)](#)

WP 1: Federated Science Data Centre and Big Data Challenges

WP 2: MeerKAT Imaging and Signal Processing

WP 3: Real-time Screening and Transient Identification

WP 4: On-the-fly Interferometry during Scanning Mode Observations with MeerKAT

WP 5: Preparing the SKA-MPG Telescope for the SKA Era

D-MEERKAT-II: EVENTS SINCE GLOW COUNCIL 2020

- ▶ **D-MeerKAT-II Cooperation Agreement** signed by all BMBF-funded and associated partners (December 2020)
- ▶ **Hosting agreement for GLOW Storage & Computing Cluster** was signed by FZ Jülich and Bielefeld University on December 11, 2020
- ▶ **Open virtual 2-day workshop** April 7 & 9, 2021 including talk by Fernando Camilo (SARAO)
- ▶ First project report delivered (April 2021)
- ▶ D-MeerKAT PI strategy conference on June 10, 2021
- ▶ D-MeerKAT virtual workshop on November 11, 2021
- ▶ ALL WORK PACKAGES MAKE PROGRESS, SEE SUMMARY TALK ON WEDNESDAY

MEERKAT & D-MEERKAT @ RADIO 2021

Kenda Knowles (Rhodes University of South Africa) - A MeerKAT on the lookout for cluster collisions

Sarrvesh Sridhar (MPIfR) - Introducing the MPIfR Galactic Plane Survey (MGPS)

Ferdinand Jueneman (MPIfR) - Precise constraint of the cosmic microwave background radiation with a new S-Band southern sky survey

Natasha Maddox (LMU) - New results from the MIGHTEE survey: Neutral hydrogen over the past 1 billion years

Simon Ding (MPA) - Multi-frequency imaging of Hydra A with RESOLVE

Jonah Wagenveld (MPIfR) - MALS - The first steps towards a kilo square degrees deep radio continuum sky

D-MeerKAT session on Wednesday:

Hans-Rainer Kloeckner (MPIfR) - Updates on MeerKAT, SKA, SRSRC

Mayumi Sato & Dominik Schwarz (Bielefeld University) -
Summary of on-going activities and access to GLOW HPC cluster

Discussion on Radio Astronomy Data Centre and steps towards SKA