



Max Planck Institute for Radio Astronomy (MPIfR)
Prof. Dr. Michael Kramer (Project Coordinator)

University of Bonn
Prof. Dr. Frank Bertoldi

Bonn-Rhine-Sieg University of Applied Sciences (H-BRS)
Prof. Dr. André Hinkenjann

Ruhr University Bochum (RUB)
Prof. Dr. Ralf-Jürgen Dettmar

Dortmund University of Technology
Prof. Dr. Dr. Wolfgang Rhode
Dr. Dominik Elsässer

Bielefeld University
Prof. Dr. Dominik Schwarz

University of Cologne
1st Institute of Physics
Prof. Dr. Stefanie Walch-Gassner

Regional Computing Centre
Prof. Dr. Stefan Wesner

Jülich Research Centre (FZJ)
Prof. Dr. Susanne Pfalzner

B3D Project Office

Project Management
Viola Tegethoff

VdR Office
Alexander Kappes

Transfer Management
Jessica Koch



info@b3d.nrw

<https://b3d.nrw/en/>



Photo credit: H-BRS; NASA/DLR; Cyril Tasse/LOFAR surveys team; SARAO; Walch-Gassner/Uni zu Köln; ESO ALMA; MPIfR; ASTRON; FZJ; Vertex Antennentechnik GmbH und CCAT Observatory Inc.

BIG BANG TO BIG DATA (B3D)

NRW cluster for data-intensive radio astronomy



Funded by:

Ministry of Culture and Science
of the State of
North Rhine-Westphalia



The research initiative B3D

The cluster "Big Bang to Big Data" combines radio astronomical research with data science expertise.

Radio astronomical data streams are made available to science and industry to develop and test new algorithms. The goal is to synergistically improve the understanding and processing of these data as well as to methodically and infrastructurally prepare science for the growing flood of data.

Based on the B3D results, a "Big Data Campus" is to be established in NRW in five years' time, where automated data processing and quality management procedures will be further developed using Big Data and AI methods. Here, companies will have the opportunity to test industrial applications.

New qualification programs are being created for the next generation of scientists in the field of Big Data.

Your opportunity

B3D offers you:

- Access to **extensive datasets**, free of personal protection requirements
- Contact with **excellent young professionals**
- Co-design of a **sustainable graduate program**
- **Cooperation** with universities and research institutions involved in this project

Your input

Support us with your expertise and get in touch with us.

Together with you, we will identify the demands on your future staff and will develop the curriculum of a graduate and trainee programme.

You supplement the academic curriculum by offering internships in your company, thus enabling a practice-oriented training.



Credit: SARA0, Heywood et al./J.C. Muñoz-Mateos