Scientific staff (d/w/m) wanted in research, management, coordination, communication.

Big Bang to Big Data is an interdisciplinary cluster in North Rhine-Westphalia (Germany) for research, technology and education in the field of data-intensive radio astronomy. It combines radio astronomy and astrophysics with data science and data technology. We are an association of eight universities of applied sciences, universities and research institutes in North Rhine-Westphalia (NRW). We are involved in the development, operation and use of leading radio observatories (including ALMA, APEX, Effelsberg, FYST/CCAT-prime, LOFAR, MeerKAT, SKA, SOFIA) and the processing and analysis of their radio data, or contribute data science and data technology expertise. We collaborate with a number of industry partners. Together, we want to create the basis for filtering out the cosmic signals from the enormous data volumes of future radio observatories, also by means of "machine learning" and "artificial intelligence". The linking of radio astronomical research with data science nourishes the exchange between exciting basic research and application-oriented research and thus enables a variety of new fields of work.

B3D is funded by the North Rhine-Westphalian Ministry of Culture and Science from November 2021. We are looking for scientific staff in basic research, development, administration and science communication. The advertised positions are temporary and are to be filled as soon as possible. We are currently recruiting for our new team:

- **Head of the office** of the *Verein für datenintensive Radioastronomie e.V.* (VdR) (MPIfR Bonn; **job advertisement**, 31.1.22).
  Tasks: Preparation and follow-up of meetings, content-related support of the board, acquisition and allocation of funding, chairing meetings, representation of interests.

- **Researcher to support the VdR office** (University of Bonn; **job advertisement**, 31.1.22).
  Tasks: Advising the association members and committees; factual research and answering enquiries; supporting funding initiatives and the establishment of SKA in the National Roadmap Infrastructures; networking; press and public relations work.

- **Technology Transfer Manager** (MPIfR, Bonn; **job advertisement**, 31.1.22).
  Tasks: Promotion of the initiative to industry, politics, BMBF, DFG, MPG, etc., initiation of cooperation agreements with industry, support in arranging internships, organisation of workshops and conferences.

- **Researcher (research and support)** (Bielefeld University; **job advertisement**, 10.1.22)
  Tasks: Curriculum development for integrated astronomy and data science graduate education, exploration of synergies between LOFAR and MeerKAT, fundraising support, independent research.

- **Scientist (research and support)** (University of Bonn; **job advertisement**, 31.1.22).
  Tasks: Support the establishment of a data centre and the development of methods for data transport, access and analysis, with a focus on ALMA and FYST/CCAT-prime.

- **Scientist (research and support)** (RU Bochum; **job advertisement**, 20.12.21).
  Tasks: Support the establishment of a data centre and the development of methods for data transport, access and analysis, with a focus on LOFAR and MeerKAT.

- **Scientist (research and support)** (TU Dortmund University; to be announced)
  Tasks: Coordination of data science activities and method transfer, definition of standards and program interfaces; development of AI and ML algorithms for radio interferometric reconstruction; integration of astronomical expertise; implementation for specific hardware environments and improvement of resource efficiency.

- **Scientist (research and support)** (FZ Jülich; **job advertisement**, 2.1.22).
  Tasks: Linking simulation and observation data management, archiving and HPC computing, support in project management and fundraising, independent research.

- **Part-time research data manager** (University of Cologne, Institute of Astrophysics; **job advertisement**, 10.1.22).
  Tasks: Networking, coordination, communication, testing of novel methods with focus on CCAT-prime and SOFIA).

- **Scientist** (University of Applied Sciences Bonn-Rhein-Sieg, Institute for Visual Computing)
  Tasks: Research in the areas of big data analytics and scientific visualisation, application and coordination of third-party funded projects and third-party funding acquisition; networking activities with the other participants of the B3D (**from 1.9.2022**).

A background in astronomy and/or data science is desirable, but please see the individual advertisements for details of each post. For enquiries about the individual vacancies, please contact the B3D website (**https://b3d.nrw/stellenausschreibung/**) indicated contact persons or write to us: jobs@b3d.nrw. We strongly welcome applications for several of the above positions at the same time.

The B3D cluster is committed to increasing the proportion of people with disabilities in its workforce and therefore invites applications from qualified candidates. Furthermore, we aim to increase the proportion of women in areas where women are underrepresented and therefore explicitly encourage women to apply. We offer a dual career service.