

Report from KAT

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3 Dec 2020

The next 20+10 minutes

- A few facts on the KAT
- KAT strategy meeting 2020
- BMBF funding period 2020-2023
- BMBF and LNGS infrastructure
- BMBF-JINR cooperation
- NFDI and ErUM-Data
- KAT Guidelines and elections

Elected representatives of astroparticle physics; thematic constituencies:

Constituency	Elected	Deputy
Dark Matter	Manfred Lindner	Federica Petricca
Neutrino properties	Kathrin Valerius	Stefan Schönert
Low-energy ν astrophysics	Achim Stahl	Michael Wurm
Cosmic rays	Andreas Haungs (Dep.)	Martin Erdmann
Gamma-ray astronomy	Stefan Funk	Jim Hinton
High-energy ν astrophysics	Uli Katz (Chair)	Elisa Resconi
Nuclear astrophysics	Roland Diehl	Camilla Hanson
Gravitational waves	Karsten Danzmann	Harald Lück
Theory	Thomas Schwetz-Mangold	Martin Pohl

Plus ex-officio members of important players/partners/groups (no voting rights)

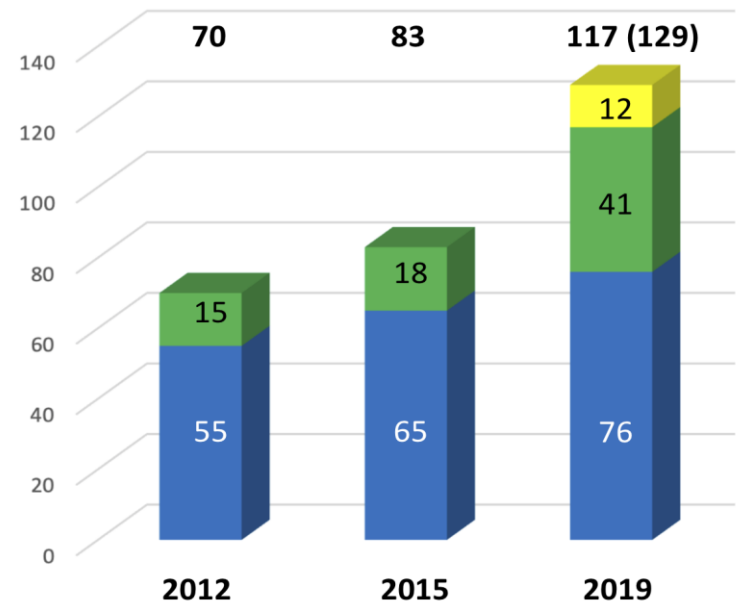
Astroparticle physics in Germany

From 2018,
needs update



From the 2019 strategy paper:

Entwicklung der Astroteilchenphysik in Deutschland



- Professorinnen/Professoren und Privatdozentinnen/Privatdozenten
- Nachwuchsgruppen- und Forschungsgruppenleiterinnen/leiter
- Neue Astroteilchenphysikgruppen mit Interesse an Gravitationswellen

This session: Reports etc.

- KAT report (this presentation)
- Greeting and introduction BMBF
Welcome Eckart Lilienthal and Timo Lebe from BMBF/711!
- APPEC and EPPSU: Christian Stegmann
- yHEP: Michael Schimp

KAT strategy meeting 2020

- New challenge: Meeting via Zoom
 - Reduced duration
 - No informal communication, no dinner, no Lichtenberg-Keller
 - Please participate in discussions!
- Participation: Open to full astroparticle community
- Agenda
 - Today 16:00-17:25: Reports etc.
 - Today 17:40-19:20: Upcoming future projects
 - Tomorrow 13:30-14:30 & 15:30-16:50: Highlight talks
 - Tomorrow 14:30-15:30: Digital agenda, KAT Guidelines and elections

Projects:

- CTA, IceCube, Pierre Auger (gamma-rays, neutrinos, cosmic rays)
- KATRIN (neutrino mass)
- GERDA \rightarrow LEGEND ($0\nu 2\beta$)
- XENONnT and CRESST-III; preparation of DARWIN (direct dark matter searches)

All included in call

New:

- Gravitational waves \rightarrow Einstein Telescope

Cross-sectional items (cf. presentation):

- Computing & Big Data Science
- Science communication & Outreach
- Networking and coordination structures

Note: Data analysis
not BMBF-funded
in astroparticle physics,
but in particle and
hadron/nuclear physics

Theory:

- Work in immediate cooperation with experiments

ErUM-Pro 2020-23: Outcome

Projects:

- All received funding ...
- ... including gravitational waves!

Cross-sectional items:

- Not funded, applications withdrawn

See also BMBF presentation

PhD salaries

- 2/3 E13 positions applied for
- Too early to judge implementation, but PhD salaries definitely receive enhanced attention.
- Difficult to bring BMBF, DFG, Max-Planck, HGF and university rules and constraints “under one umbrella”.

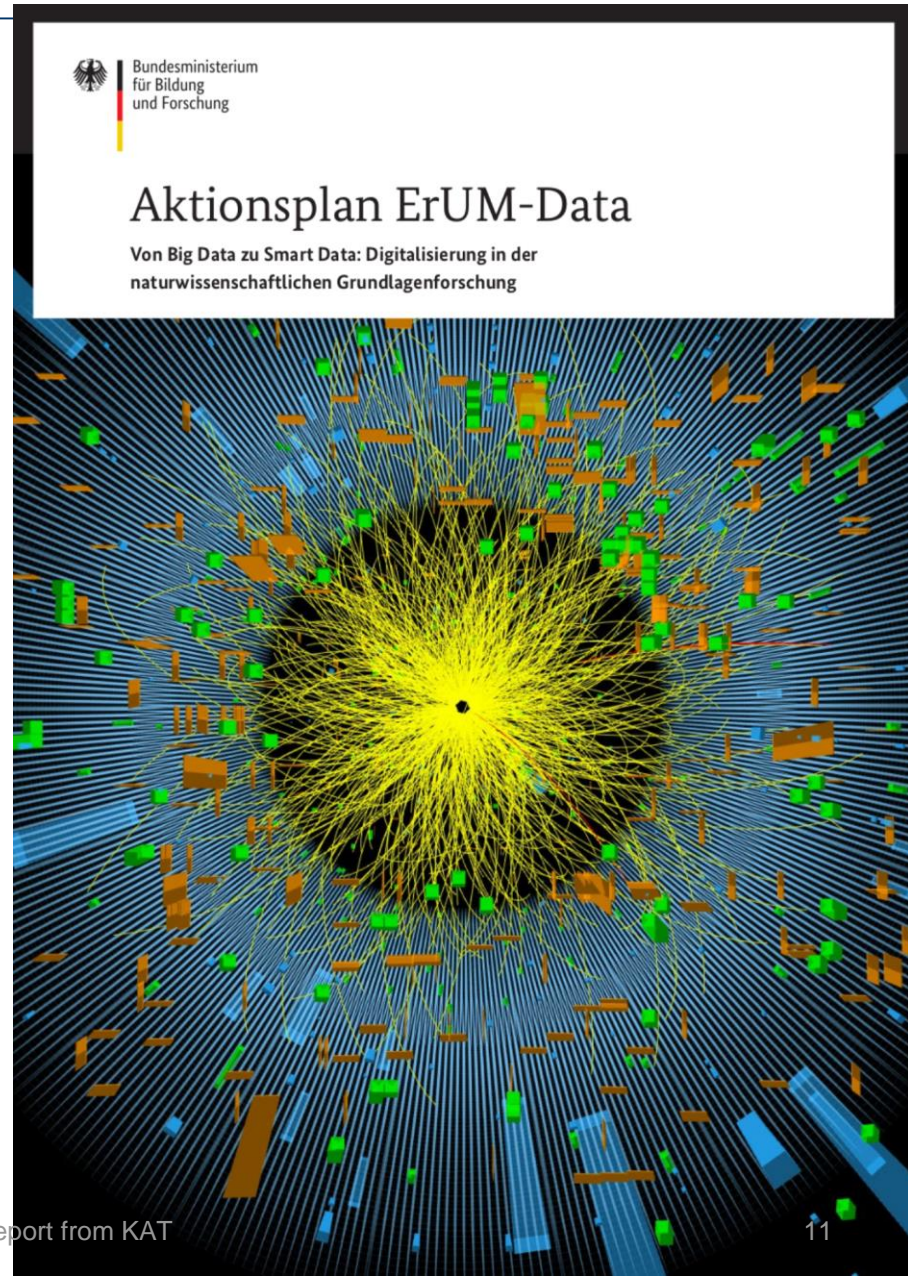
- BMBF support for LNGS infrastructure in the framework of a bilateral German-Italian cooperation.
- Discussions started 2019, KAT involved end-2019
- Timeline:
 - 12/2019: Discussion at strategy meeting, call for suggestions
 - 02/2020: Discussion of project list in phone meeting
 - 03/2020: Decision on and unanimous endorsement of project list by KAT, list communicated to BMBF
 - 06/2020: Start discussing projects with Italian side
 - 7-9/2020: Evaluation of projects by small GER-IT expert teams
 - 09/2020: Call for proposals, evaluation by German review panel
 - 12/2020: Decisions expected very soon.
- Discussion process fully transparent, complete German astroparticle community included.

BMBF-JINR cooperation

- BMBF in process of upgrading structure of cooperation agreement with JINR/Dubna, Russia
- Meeting of KAT representatives with Dmitry Naumov (JINR), 24 June 2020: Strong push to include astroparticle physics
- Discussion with PT-DESY at 23 Oct 2020:
 - Main objective: Strengthening cooperation and communication (exchanges, workshops, ...)
 - No invest money
- Application “Enhancing Russian-German research cooperation in the field of Astroparticle Physics” submitted.
Objectives:
 - bilateral workshop (expected fall 2021)
 - PhD and postdoc positions in Dubna for German scientists

NFDI and ErUM-Data

- NFDI:
 - First-round proposals PAHN-PaN and Astro@NFDI rejected.
 - Second-round proposal PUNCH4NFDI submitted.
 - Evaluation soon.
- ErUM-Data:
 - Action plan published.
 - First call will focus on machine learning and artificial intelligence, expected soon.
 - More: See presentation by Andreas Haungs (tomorrow 14:30).



KAT Guidelines and elections


- KAT Guidelines: The “constitution” of KAT
 - Initial version from 2004, updated 2014
 - Amendments require endorsement by the astroparticle community.
 - New version available on Indico page (in German).
 - It will be discussed and submitted to voting tomorrow.
- KAT elections
 - If amended Guidelines are endorsed, a reduction/extension of the election period by up to 1 year will be possible.
 - KAT will make a corresponding proposal to avoid quasi-coincidence of KAT election and preparation of ErUM-Pro strategy process.
 - Endorsement by the astroparticle community required.
- More details and voting tomorrow 14:45-15:30.

And finally, a “product advisory”

Die Physikshow der Uni Bonn präsentiert:

Der Physikalische Adventskalender

Ab dem 1. Dezember

 Auf dem YouTube Kanal der Physikshow





Tauchen Sie mit Martin und Steffi in die Welt ihres physikalischen Adventskalenders ein.

Jeden Tag bis Weihnachten ein neues Video mit spannenden Experimenten.

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