

ET and the KAT strategy document

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ET community meeting, Zoom
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What is the KAT strategy paper?

- So far: KAT strategy papers with 3-year reach for preparing ErUM-Pro strategy talks, last versions 2019 and 2022 (together with RDS):



- New situation after advent of DZA: Common strategy DZA+KAT+RDS needed → Longer-term strategy, not only focussed on ErUM-Pro
 - RDS: Update of „Denkschrift“
 - KAT: New **KAT strategy paper**, reach of 10+ years
- Target date: end-2024

Towards the KAT strategy paper

- End-2023: Collected „bottom-up input“:
 - Project fact sheets
 - Key science questions
- Decided on rough structure (similar to RDS Denkschrift):
 - Executive summary
 - 1. Introduction
 - 2. Astroparticle physics in Germany
 - 3. Key science questions and results of astroparticle physics
 - 4. Plans and challenges for the next decade
 - 5. Astroparticle physics and society
 - 6. Recommendations
 - Appendix
- Next steps, timeline
 - Topical Workshops, organised by KAT members (until mid-June)
 - First text contributions (end-June)
 - Draft document (end-September)
 - Community meeting (**16-18 Oct. 2024, Karlsruhe**): Discussion and feedback
 - Bad Honnef meeting (**28+29 Nov. 2024**): Endorsement

- Next ErUM-Pro funding period 2026-2029
 - KAT recommendations early 2025
 - Processes almost aligned in time
 - Continuity of ErUM-Pro funding will be reflected in longer-term strategy
- Gravitational Waves in 2022 document:

Das KAT empfiehlt, Entwicklungen zu Themen aus Wissenschaft, Infrastruktur und Technologie im Zusammenhang mit den Gravitationswellenobservatorien der nächsten Generation strategisch zu fördern und dieses Forschungsfeld den Universitäten zugänglich zu machen. Das KAT bittet deshalb um die Unterstützung von F&E und experimentnaher Entwicklungsarbeiten für einen Gravitationswellendetektor der nächsten Generation (Einstein-Teleskop). Weiterhin empfehlen wir, eine zukünftige intensivere Einbeziehung der Gravitationswellenphysik in der Multimessenger-Astronomie zu unterstützen. Bei einem positiven Entscheid für die Errichtung des Deutschen Zentrums für Astrophysik – DZA in der Lausitz bittet das KAT um Unterstützung, um die Universitäten an dem Prozess partizipieren zu lassen.
- This will of course be updated and extended in time reach.
No recommendations to support construction through ErUM-Pro ... ?!

- KAT has a long history of strongly supporting ET
 - Gravitational Waves = KAT constituency
 - Pushing for ErUM-Pro support early-on
 - Striving for DFG support for MM investigations including GW (with RDS)
 - ...
- However, ET is a project far outside the „KAT resources frame“
 - Reminder: ET(D) = several 100 M€; ErUM-Pro(AP) = 20 M€ in 3 years
 - Concerns that the „big elephant in the room“ will deplete resources for ongoing activities and other, smaller upcoming/future projects
 - It will be of key importance to construct funding scenarios that allow for constructive and synergetic co-existence
 - We must avoid a competition ET vs. the „rest of astroparticle physics“
- KAT is ready to support this process!