

KAT**Video meeting via zoom, 16 October 2020, 13:00-15:42 CEST****Present:**

Roland Diehl (RD), Ralph Engel (RE), Stefan Funk (SF), Andreas Haungs (AH), Thomas Hebbeker (TH, DPG&KET), Marc Hempel (MH, PT-DESY), Uli Katz (UK, chair), Manfred Lindner (ML), Katinka Petersen (KP, PT-DESY), Federica Petricca (FP), Martin Pohl (MP), Anna Pollmann (AP, yHEP), Elisa Resconi (ER), Michael Schimp (MS, yHEP), Thomas Schwetz-Mangold (TSM), Achim Stahl (AS), Christian Stegmann (CS, DESY), Kathrin Valerius (KV), Jörn Wilms (JW, RDS), Michael Wurm (MW).

Absent:

All others.

Invitation and agenda:

By email.

Indico page:

<https://indico.scc.kit.edu/event/2058/>

Summary	Action
<p>1. Welcome, agenda, minutes of last meeting Katinka Petersen from PT-DESY was welcomed as a new ex-officio member of the KAT. She is responsible for the ErUM-Data activities in the “Universe” sector.</p> <p>The minutes of the zoom meeting on 16 July 2020 were provided too late for approval. A one-week deadline for comments was set. If no requests for amendments are received by then, the minutes will be considered approved.</p>	<p>UK: Finalise minutes.</p>
<p>2. KAT strategy meeting It was unanimously decided to organise the KAT strategy meeting as a pure online-meeting via zoom. Main reasons were the COVID-19 uncertainties, the suboptimal conditions for external participants in hybrid meetings, and the organisational overhead of a hybrid solution. The meeting will cover two half days on 3 and 4 Dec 2020¹.</p> <p>AH and UK will organise the agenda. All KAT members are asked to suggest presentation topics and speakers.</p>	<p>UK: Cancel reservation in Bad Honnef.</p> <p>AH&UK: Prepare agenda</p>
<p>3. Online community meeting Possible formats and dates for the intended online community meeting (cf. minutes of 16 July 2020) were discussed. In view of the tight timeline and in order to avoid a proliferation of meetings it was decided to use the second day of the strategy meeting (4 Dec 2020) for this purpose. The program of that day will be open to the full community.</p> <p>We also discussed a possible open KAT seminar series. It was felt</p>	<p>n/a</p>

¹ Please note that in the meeting we discussed 4 and 5 Dec, which was wrong.

<p>that a further increase of the number of online presentations will not establish an added value for the community. Rather, ER suggested to collect upcoming online presentations from astroparticle physics in an online calendar and provide corresponding alerts to the community. This proposal was unanimously endorsed. ER will start working on it, RE offered support.</p>	<p>ER: Set up calendar of online presentations.</p>
<p>4. KAT digital working group (DWG) No progress since last meeting (cf. minutes from 16 July 2020). A proposal is to be presented at the next meeting.</p> <p>All KAT members are invited to nominate further DWG members. To See the Indico page of previous meeting for the list of nominations.</p>	<p>AH, UK: Produce proposal-.</p> <p>All: Make further nominations</p>
<p>5. KAT-RDS initiative to discuss funding situation with BMBF RDS has suggested a common KAT+RDS approach to the BMBF to discuss the funding situation. This was triggered by the shortage of funding in the last ErUM-Pro (Verbundforschung) round and also by questions regarding the distribution of funding between astrophysics and astroparticle physics. It was informally agreed between UK and the new RDS chair, Michael Kramer, to pursue this initiative after the KAT meeting.</p> <p>KAT supports this initiative. CS emphasised that the discussion should involve neighbouring fields (in particular particle, nuclear and hadron physics) and that the main objective of a discussion with BMBF should be to convey the importance of a common strategy for these fields. Astro- and astroparticle physics have to stand together; the distribution of funds between these fields is not the major issue.</p> <p>We must prepare the ground for accommodating upcoming major projects such as IceCube-Gen2, DARWIN, LEGEND-1000 and ET (and of course also ground-based astrophysics projects) in the BMBF funding plans. We must argue on scientific grounds and promote extending this discussion to a larger scale.</p> <p>UK will contact Michael Kramer to discuss the next steps in consultation with MH. It is intended to ask for a meeting with Eckart Lilienthal (head of BMBF division 711).</p>	<p>UK: Contact Michael Kramer</p>
<p>6. KAT guidelines (“Leitlinien”) The new KAT guidelines are close to final and need to be endorsed soon, since the modification of the current election period by ± 1 year might entail KAT elections by early 2021. It was decided that the corresponding vote of the astroparticle community will be held at the second day of the strategy meeting (4 Dec 2020).</p> <p>The Guidelines will be circulated in KAT by end-October for final comments and then disseminated to the group leaders about 2 weeks ahead of the strategy meeting.</p>	<p>AH, UK: Finalise guidelines</p>
<p>7. DPG meeting Dortmund, spring 2021 Most of the plenary, main and invited talks (Plenar-, Haupt- und eingeladene Vorträge) at the DPG meeting 2021 of the particle physics division have been/are to be offered to the speakers selected for the DPG meeting 2020 in Bonn, which has been cancelled. This process is concluded for the plenary and main talks</p>	<p>All: Suggest speakers</p> <p>UK: Present suggestions in</p>

<p>(3 additional slots have been assigned to theory, detector development and neutrino physics). TH reported that the Matter and Cosmos Section (SMuK) of DPG is planning an online event in the week before the meeting in Dortmund, which may provide further prominent presentation slots.</p> <p>For the invited talks, 2 additional slots are available, and 3 further slots will be reassigned. TH encouraged KAT to suggest at least 2 speakers and topics for the invited talks. It is mandatory that the speakers are in a career phase for which the invitation is supportive (e.g. applying for permanent positions).</p> <p>Please make corresponding suggestions. The program committee will meet on 22 Oct 2020 and take decisions.</p>	<p>program committee</p>
<p>8. ErUM-Data and NFDI AH reports (see slides on Indico page).</p> <p><u>ErUM-Data:</u> KP confirmed that the action plan (“Aktionsplan”) is about to be released by BMBF, and a call for proposals focusing on machine Learning and artificial intelligence is expected before the end of 2020.</p> <p>Two proposals were already initiated, one on federated infrastructures (to be submitted to ErUM-Pro in “Verbundforschung kleinste Teilchen”) and one on big data analytics which will wait for the ErUM-Data call. It will have to be seen how well astroparticle physics is represented in the latter proposal. AS suggested an internal call (announced to the astroparticle group leaders) to take stock of possible contributions and collect the information needed to judge where a standalone astroparticle application might be promising. This process will be organised after the call for proposals has been released.</p> <p>On the science side, ErUM-Data is to be implemented through a bottom-up consortium dubbed “DIGUM” (Digital transformation in the research on universe and matter). DIGUM is coordinated by a “Digitization Board” led by Martin Erdmann and comprising representatives of 8 committees (KAT is represented by AH and UK), PT-DESY, resource providers, NFDI, and the ErUM-Data pilot project. DIGUM guidelines have been drafted and an application for a central office (DIGUM-HUB) is being prepared; both are available on the Indico page.</p> <p>KAT is asked to scrutinize guidelines and DIGUM-HUB application. Feedback is requested until 23 Nov 2020.</p> <p>A DIGUM workshop is envisaged to bring together the different science communities and to explore synergies and application scenarios. KAT strongly favours to hold this workshop after the call for proposals has been published.</p> <p><u>NFDI:</u> The PAHN-PAN and Astro@NFDI consortia have been merged to PUNCH4NFDI (Particles, Universe, NuClei and Hadrons for the</p>	<p>All: scrutinise DIGUM guidelines and DIGUM-HUB application and send comments to AH and UK</p>

<p>NFDI). Participation of astroparticle physics is rather small. The proposal was submitted on 28 Sept 2020, evaluation is scheduled for 10 Dec 2020.</p>	
<p>9. Bilateral BMBF-LNGS cooperation ML reports: The bilateral treaty between BMBF and the Italian ministry includes German Funds for scientific infrastructure projects at LNGS. The list of proposals which was collected by KAT in a transparent process within the community was communicated by BMBF to the Italian side (INFN/LNGS). Most of these proposals were considered interesting by INFN/LNGS and small bilateral teams of experts were asked to prepare a short outline describing the agreed scope and costs of each project. Projects selected in the subsequent BMBF-Italian consultations have been asked to submit applications to BMBF (deadline 5 Oct 2020), which are now under review by an expert panel.</p> <p>MH expects that the final results will be available in Dec 2020. If known in time, the outcome will be reported at the strategy meeting. He confirms that the process was well managed by KAT.</p>	n/a
<p>10. Bilateral cooperation BMBF-JINR No news since last meeting (cf. minutes of 16 July 2020).</p>	n/a
<p>11. Helmholtz research infrastructure roadmap AH reports: HGF is currently preparing an update of their research infrastructure roadmap. In a first step, expressions of interest in form of short fact sheets ("Steckbriefe") have been collected. From astroparticle physics, fact sheets from IceCube-Gen2, ET, DARWIN and GCOS (Global COSmic ray observatory) have been submitted.</p> <p>Pre-proposals have then been requested for IceCube-Gen2 (urgent since funding is to be available 2024/25) and ET (urgent since, due to its financial volume and the application to the ESFRI roadmap, the project will need to be included in the upcoming national roadmap process).</p>	n/a
<p>12. IceCube-Gen2 ER reports: The IceCube Upgrade (7 additional strings in dense configuration) is financed and expected to be deployed 2022/23. It will provide a testbed for technology developments for IceCube-Gen2.</p> <p>An application for IceCube-Gen2 to NSF is being pursued in close coordination with NSF, targeting the NSF invitation to submit a proposal. As part of this process, a Technical Design Report (TDR) for IceCube-Gen2 is to be prepared on a time scale of about one year. The expectation is that IceCube-Gen2 construction will start once the IceCube Upgrade is ready.</p> <p>NSF expects 50% of the investment money (180 M\$ in total) to come from outside the US, and Germany/HGF is the major partner for NSF. CS specifies that a German contribution of 40 M€ is targeted, shared between BMBF and HGF.</p>	n/a

<p>Support by the community (i.e. KAT), in particular a strong statement on the high priority of IceCube-Gen2, will be requested and will most likely already be due at the KAT strategy meeting. On the longer run, a workshop addressing scientists and decision makers, e.g. in conjunction with ICRC 2021 in Berlin, is under consideration.</p> <p>ML points out that several large astroparticle projects are in preparation at a very similar time line and that an effort should be made to smoothen the overall spending profile. In addition, the financial needs for FAIR and the longer-term major investment for ET may/will play a role.</p>	
<p>13. AOB</p> <p><u>0νββ:</u> KV reports on behalf of Stefan Schönert that a European meeting on 0νββ under auspices of APPEC will be held on 3 Nov 2020 to prepare a common European input to the US 0νββ downselect (see KAT minutes of 16 July 2020).</p> <p><u>Next meeting:</u> The next KAT meeting is planned for 3 Dec 2020, preceding the strategy meeting. An intermediate meeting will be scheduled in case there is a specific need.</p>	n/a

03 December 2020

Andreas Haungs and Uli Katz