

6th APPEC General Assembly June 22, 2015 Nikhef, Amsterdam, The Netherlands Minutes

Present

Teresa Montaruli, Stan Bentvelsen, Janet Seed, Christian Stegmann, Reynald Pain, Laurent Favart, Lars Bergstrom, Johannes Blümer, Thomas Berghöfer (General Secretary - GS), Sylvie Leray, Antonio Masiero (SAC Chairman), Catherine DeClercq, Sylvie Leray, Claus Madsen (observer ESO), Frank Linde (Chairman), Job de Kleuver, Ino Agrafioti (Secretariat).

Invited: Markus Nordberg, Stavros Katsanevas, Hans-Jürgen Donath, Sandra Hesping.

Apology

The chairman received apologies for their absence from Sergio Bertolucci (who was replaced in this meeting by Markus Nordberg), Fernando Ferroni, Philippe Chomaz (replaced in this meeting by Sylvie Leray), Halina Abramowitz and Jose Angel Villar/Paco del Aguila.

Lab Tour

The APPEC GA thanks Daan van Eijk and Eric Hennes for their enthusiastic tours of the KM3NeT DOM/string facility and the advancedVIRGO demonstrator, respectively.

1. Adoption of the Agenda

The agenda was adopted.

Spain will from now on be represented in APPEC by Jose Angel Villar or Mario Martínez Pérez.

2. Welcome and short presentation Nikhef director Stan Bentvelsen

Stan Bentvelsen welcomed the APPEC GA and presented Nikhef's Astroparticle Physics portfolio, composed of Xenon1T (with ambition to continue for XENONnT), KM3NET (with ambition to enter KM3NeT 2.0 in the new ESFRI roadmap and to start an ERIC in the Netherlands), Advanced VIRGO, Auger (with ambition to use radio emission as well). Finally, he mentioned a recent Nikhef spin-off company, called InnoSeis, which is developing "TremorNet" wireless seismic small sensor networks that was developed for AdvVirgo, but can also be used for on-shore oil and gas exploration and monitoring.

3. Approval of minutes of the 5th GA, January 9, 2015

The minutes were approved.

4. Report of the Chairman

Long Baseline Neutrino Programme

Since the June 2014 APPEC neutrino meeting, the DUNE collaboration has been advancing very fast. The International Advisory Council has been already established. The Chairman emphasized that in fact APPEC is well represented in this council, given that 5 out of the 14 members are members of the APPEC GA.

A discussion followed on the funding of the DUNE collaboration. Depending on the country, funding for the accelerator and non-accelerator neutrino programme is coming either from the same or different agencies, which means that different competition dynamics are created in each APPEC member country. For example, Christian Stegmann (CS) mentioned that in Germany PINGU/ORCA and DUNE will be funded using the same funding source, so in Germany these projects compete (and in addition DUNE is basically classified as an accelerator project and falls therefore outside the scope of astroparticle physics). Antonio Masiero (AM) said that the GA should not forget in its discussions the short baseline programme that is also taking place at Fermilab.

Janet Seed reported that APPEC received a letter from Tord Ekelof who wanted to ensure that ESSnuSB (the European Spallation Source Neutrino Super Beam proposal), is properly considered in the APPEC roadmap under preparation. APPEC-SAC Chairman Masiero confirmed that ESSnuSB is part of the scientific proposals considered by the SAC. Lars Bergstrom said that the Swedish research council recently stated that even though the project is scientifically excellent, it was not included this year in the Swedish roadmap since they considered that there is a number of issues to be resolved. The Chairman emphasized that this issue should be discussed again in the future, since all projects should receive the required attention. The Chairman also mentioned that ESSnuSB will be scrutinized by the ICFA installed neutrino panel later this year.

Support letter policy/guidelines

The guidelines for support letters proposed by the Chairman were approved by the GA. The Chairman emphasized that when the scientific communities require a letter of support from APPEC, they should request it well in advance, so that it can be properly discussed by the GA. APPEC should discuss in the letter how the project fits in the strategy of APPEC, but not the quality of the proposal itself, especially in the case of multiple collaborations requesting letters of support for proposals to the same Horizon2020 Call.

In the future the letters should include the relevant texts from the roadmap, since everyone has already agreed upon these texts.

5. Strategy towards the new APPEC roadmap

Masiero presented the written plan for the new APPEC roadmap, including an outline of the new roadmap, the division of tasks between SAC and APPEC-GA and the proposed time schedule for the production, discussion and approval of the new roadmap.

Discussion concentrated on the Strategy Statement that will be under the responsibility of the GA. It will be formulated after the Town meeting and needs to be discussed in national communities before it can be finalised. APPEC is a forum for discussion so its members do not commit at the National level when signing the Strategy Statement: the statement's purpose is to give impact to the roadmap and for Europe to show that it is more coordinated than it appeared in the previous roadmaps. The agencies should be able to use the document in the making of their strategy and their roadmaps. Finally, Stan Bentvelsen noted that the roadmap document should mention the progress that has happened thanks to the previous roadmaps.

Even though there are some concerns about the ambition and the timing of the roadmapping process, the GA agreed with the procedure, outline and time schedule with a few changes on the strategy document. In October it will be decided if there is a need for another GA meeting before the end of the year to discuss aspects of the draft roadmap.

The roadmap: will consist of three parts:

- Roadmap itself, composed of 7 chapters:
 - introduction, core chapter, transversal issues (to be written by the SAC)
 - European APP community, global aspects, society impact, interdisciplinary (to be written by the APPEC GA/JS)
- Executive summary (it will summarize the main points of the roadmap first draft will be prepared by the Chairman, Katsanevas and Masiero and will then be discussed by the SAC and APPEC GA)
- Strategy statement (will contain the action items, so it will be added at the very final part of the process and after the discussions at the Town meeting).

The following time schedule was agreed:

- Beginning of October: the SAC will submit their three chapters to the APPEC Chairman.
- Early November: the Chairman with Masiero and Katsanevas will elaborate the full Roadmap (seven chapters) and the Executive Summary, which will be then approved by the SAC.
- Optional: a GA meeting to discuss aspects of the draft roadmap
- Early December, the SAC will submit any possible changes to the APPEC Chairman. Once approved, APPEC will send the Roadmap/Executive Summary to the scientific community for discussion at the Town Meeting.
- Early February: Town Meeting in Paris
- GA-meeting the day after the Town Meeting
- Preparation and approval of the Strategy statement (including action items) by the GA in spring 2016.
- Before summer 2016: the full roadmap will be released as a glossy document including the Strategy statement.

6. APPEC Census: procedure for approval

The Chairman presented the draft online census (available via this link:

http://www.nikhef.nl/tmpfiles/kees/appec-survey/ (login: user: appec, password: 2015appec)). After discussion the Chairman concluded that is important for our field to have statistics about gender and that he will add fields in the census to gather detailed info for that. The survey has to be filled on the level of a country and that within a country some coordination takes place between different organizations, as was the case by the former ASPERA census.

The GA approved the procedure for the census with the following suggestions. First, it is important to clarify to the agencies when the survey is sent out why is APPEC collecting this dataset in order to convince the people to input the required information. Second, it was suggested that either the people filling it should be able have access to their survey multiple times (through logging-in), or an excel sheet should be provided, so that they will be able to fill it in at different stages and then input the final numbers online.

Finally the Chairman invited the GA to send him comments/suggestions on the census by the end of July, in order to release the survey to the agencies in September.

7. APPEC Project fact sheets

The purpose of the fact sheets is to aid the monitoring of the projects by the GA and they are considered for internal use by APPEC. The answers to the question "what can APPEC do for the project" were found to be especially interesting, making the interaction with the collaboration obligatory.

After discussion the GA agreed that the fact sheets should be adapted to focus on facts about costs and human resources and the outstanding issues in the next 12 months. It was noted that it is useful to update the factsheets periodically. When it is not a heavily European project, only the European lead and the European stats should be provided in the fact sheet.

The list of projects involves all those currently in the roadmap, but there are also others with smaller European contribution (e.g. Telescope Array), which should not be forgotten if APPEC is to have a good comparison on a Global scale.

Regarding the projects for which the next fast sheets should be produced, the GA decided that there is no point in postponing the fact sheets for after the roadmap since this effort has recently gained momentum. The APPEC JS should focus on the expensive projects while the roadmap is being written and that a second round of fact sheets should be produced in the following year. To ensure that the efforts put by the APPEC JS are effective, careful prioritization by the APPEC JS is needed in order to take into account in the choice of projects the pace of the projects as well.

8. White paper on APP Computing: for approval

The white paper on APP Computing was approved by the GA. The non-glossy version of the paper will be published on the website at the end of July and then the report will be turned into a glossy brochure that will be available in the Fall.

9. Scientific Advisory Committee

The two-year term of all current SAC members end in November 2015. According to terms of reference of the SAC, every year one third of the SAC members will be renewed. Nevertheless the GA approved to extend the terms of all members until the publication of the new roadmap. The GA also approved the procedure for the appointment of new SAC members in 2016. GA members are invited to send the names and CVs of the people they want to nominate by the 1st of December to Ino Agrafioti. Based on the 2012 list of nominations and the new people nominated, the Chairman will make a proposal to the GA for discussion in its next meeting. This proposal will include a list of names to be replaced in 2016, a list for 2017 and a list for 2018. It is emphasized that the main criterion for a nomination is scientific excellence and not nationality.

10.European and global issues

APIF, long-term future of international discussions

The Chairman noted that APPEC is very well represented in APIF, since most of the APIF members attending the meetings come from Europe. It is clear that APIF wants to continue after its term under the OECD ends, so the question faced is in what format. Various visions for the future have been proposed by its members, but further clarity on the future format of APIF will become clear by Spring 2016.

Follow-up global neutrino meeting

The APPEC International neutrino meetings have been a success, with APPEC providing a service not only to the neutrino community but also to LHC, and generally building the confidence of the scientific community in APPEC. This is a complementary programme that will help enrich the field, so Europe should concentrate on the aspects relating to the detector.

Cosmology workshop in Florence on 31 August/1 September

This workshop will take place in collaboration with ASTRONET. The programme was presented to the GA and the APPEC agencies were invited to attend. The website for registering: https://indico.cern.ch/event/376392/

<u>Visit to EU DG-Research representatives on May 28 about future opportunities for APP</u> Katsanevas and De Kleuver reported on their visit in the Research Infrastructure Unit in a meeting that included a long and open discussion. APPEC is urged to submit a proposal to INFRASUPP-2-2017 – International cooperation for research infrastructures in the topics:

- 1. Conduct an International landscaping exercise for Research Infrastructures to support the EU strategy of International cooperation in this field, even if they understand that we are beyond simple landscaping.
- 2. Support the cooperation between the EU and international strategic partners for the development of global research infrastructures and, or an enhancement of the current interaction among Research Infrastructures in the global arena. To be able to apply to this, APPEC needs to contact the GSOs (Womersley, Rossi, Vierkorn and Lavocat) so that they declare the field as a field of interest for global coordination. Katsanevas then reported that in discussions with Rossi, he confirmed that the underground laboratory field is about to be nominated, in October, as field of global interest.

In addition, the EC Unit representatives mentioned that the EC knows that it needs to advance further its global coordination programme and it wants to collaborate in the formulation of an more advanced programme in the next installment (2018-2019), including ERANET+ functions,

cofunding of R&D etc. Finally, regarding R&D they urged APPEC to participate in the following calls: INFRAINNOV-1-2017 – Fostering co-innovation for future detection and imaging technologies (ATTRACT) and INFRAINNOV-2-2016 – Support to Technological Infrastructures (CEA Initiative).

EUTHACA COFUND proposal second attempt

Pierre Binetruy will be the coordinator of the new proposal, he replaces Katsanevas.

11. Presentation ATTRACT

Markus Nordberg gave an introduction to the ATTRACT initiative to the APPEC GA with the aim to ensure that APPEC can inform well in advance Astroparticle Physicists so that they get in contact with the EIROFORUM communities involved in these imaging and detector sectors. His presentation is available via the APPEC cloud. ATTRACT is a completely new idea with a long-term perspective organized by most EIROFORUM members together with a few institutions specializing on innovation. The initiative concentrates on high-performance detector and imaging technologies, whose requirements have been described in detail in a bottom-up approach by the ERDIT (European radiation detectors and imaging technologies) platform (http://erdit.web.cern.ch/). Five main areas have been chosen: sensors, front end/back end electronics, data acquisition systems, software and integration. There is some pressure to use the word sensors instead of detectors: Nordberg emphasized that what is meant by sensors is ionising/non-ionising detectors.

ATTRACT was born from the idea that since scientists have been finding it easier to work with SMEs than big industry, in order to build an "innovation ecosystem" they want to fund high-risk/high-gain projects that are in the pre-R&D phase but also involve SMEs. The dialogue with the EC resulted in a call in the next H2020 Draft Work Programme (Research Infrastructures) for the Phase 1 of "Mini" ATTRACT: INFRAINNOV-1-2017 – Fostering co-innovation for future detection and imaging technologies (Budget up to 20 M Euros; call deadline 29/03/2017). At the moment they are a) organising the Project Advisory Committee (managed by Prof. John Wood), b) identifying a list of candidates that can be part of the Independent R&D&I Committee (IC), c) identifying a list of challenges for the projects to respond to, d) nominating the contact person(s) from each organization able to follow and work in the submission process.

GA members were invited to propose well-networked and well-recognized community members for the Independent scientific committee to Sergio Bertolucci (before September since it is the 1st of October that this committee will start). These people will not be reviewing the proposals: their role will be to oversee the process.

12. Proposal new APPEC common calls

The GA decided that it will be interesting to have a common call in the future but the timing is not appropriate, since they prefer to base the choice of themes on the (draft) new roadmap. Therefore it was decided to postpone this discussion for the next GA meeting.

13.Outreach

The Chairman announced that a solution has been found for the APPEC outreach and communication responsibility: in Summer the responsibility will be transferred to STFC. Janet Seed presented STFC's vision for this task. A newly recruited APPEC Communications & Outreach Officer (0.5 FTE) will be recruited, starting in September 2015, who will be co-located with a team of experts, to enable access to STFC's existing systems, networks and evaluation methods. S/he will provide regular reports to APPEC on progress against agreed targets in strategy and the final sign off of work, where necessary, will be from the Chairman.

The priorities should be: a) To ensure that the European astroparticle physics community see APPEC as their advocate, b) To position APPEC as the expert body for astroparticle physics with

funders and policy makers. A secondary priority for now will be to share the excitement of astroparticle physics with the people of Europe.

14.Report General Secretary

The General Secretary first reported on the accessions to the consortium. CERN is officially an observer and there are positive discussions with Poland and Croatia, so he is hoping that a solution will be found by the end of the year. He is also in contact with Armenia and Bulgaria. The APPEC Technology Forum 2015 in April was a huge success with 75 participants from science and industry. They discussed developments in photomultipliers, SiPMs, Transition Edge Detectors, gaseous photo-multipliers, coatings and cryostats. A summary brochure is under preparation.

The General Secretary gave an update on the Horizon2020 efforts of the community. Two projects were approved: GENERA and ASTERICS. GENERA is the Gender Equality Network in the European Research Area, is focused on physics, starts in September 2015 and includes many APPEC members. ASTERICS is a consortium of Astronomy and Astro particle Research infrastructures (including CTA, KM3NeT and Virgo) that aspires to work more closely together and develop common standards.

Finally the APPEC meeting calendar for 2015 and beginning of 2016 was presented. The next big event will be the APPEC H2020 community event that will take place on 29/30 September in Zagreb, Croatia (https://indico.desy.de/conferenceDisplay.py?confld=12108). There will be two interdisciplinary events in the autumn: one organised by the underground labs (LSC, 13-14 of October 2015, biology in underground labs) and the second organised by the CNRS-FC (November 2015, Paris, Astroparticle Physics and Climate Change). The EU TO computing meeting will finally take place in January 2016 in RAL, UK.

Activities focused on the training of young scientists were mentioned in the last meeting, but there have not been any specific activities on this issue in 2015, so something should be planned for 2016. Actions should be taken to involve the eastern part of Europe in APPEC.

15. Vice-chair(s) GA election and SAC chairman (re)election

The Chairman gave his excuses that he was not able to prepare a proposal for the election of a vice-chair. The GA approved his proposal to extend the mandate of Janet Seed as vice chair until the roadmap is published. The Chairman also announced that after the roadmap procedure he likes to evaluate the MoU in the GA. Those members that would like to suggest revisions of the MoU should do so by contacting the Chairman. The SAC Chairperson's election will be discussed in the next meeting together with the SAC composition proposal by the Chairman.

16.AOB

Claus Marsden mentioned that ESO has been discussing with CTA, regarding the South site.

Next GA meeting

The date of the next GA will be decided by email/doodle since it will be planned to coincide with the Town meeting.