

Summary of the Panel discussion with representatives of the Magnificent 7:

“The role of ASPERA – expectations from the projects”

1. What shall be the role of ASPERA/ApPEC? (Facilitator, incubator, discussion platform where national interests come together, ...?)

Ralph Engels (Auger): ASPERA/ApPEC should continue with its work as a discussion and communication platform. ASPERA should organise peer reviews and strategic reviews on proposals and play a role in setting priorities.

Eugenio Coccia (COMAG): In the case of the MoU for the Underground Labs in Europe ASPERA worked well as a facilitator. ASPERA should monitor the communities and establish a continuous exchange with researchers in Astroparticle Physics in Europe.

Werner Hofmann (CTA): A clear benefit of ASPERA is that funding agencies have a place to discuss.

Jacques Colas (E.T.): In the domain of Gravitational Wave detectors the Advanced Virgo will be carried out in 2010 and the detection of Gravitational Waves becomes probable. Compared to Advanced Virgo the Einstein-Telescope will improve the sensitivity by 1 mag. I believe ASPERA could be very instrumental in obtaining the insertion of the identified future infrastructure into the ESFRI roadmap.

Another role should be to stimulate the interest of Aspera's member to the projects. For example, there are 8 participants to ET, but the ASPERA members are many more. ASPERA should try to involve more institutions in the 7 magnificent.

Hans Kraus (EURECA): Facilitator and coordinator. It is important that pan-European experiments are supported in all participating countries and that we avoid situations such as: “we fund it if the others fund it”. Further, there could be some mechanism by which a central body acts as legal entity, representing a whole group of people. For example, for EU applications, each university has to appear as individual contractor, which often moves the number of contractors beyond manageable levels. Just as CNRS, CEA or INFN appear as one contractor serving potentially many groups, this could be facilitated through ASPERA.

Uli Katz (KM3NeT): All of this is important, but I would consider ASPERA's most important role to be a mediator for multilateral coordination of European/international projects ... i.e. beyond a discussion forum, towards an instance/forum for European policy coordination. This must of course be harmonised with similar ESFRI activities, if they exist.

André Rubbia (LAGUNA): The extension of existing or the creation of new underground laboratories is needed to host an experiment like LAGUNA. ASPERA should act as a stimulator for coordination among different scientific approaches. And it should pay attention to the rest of the world.

2. Concerning the ASPERA common call activities:

a. What do you think about this instrument of funding R&D in your domain?

Ralph Engels (Auger): Common calls are important and ASPERA should continue and release future calls.

Werner Hofmann (CTA): CTA has been topic of the current ASPERA common call. As seen from the perspective of a proposer the common call procedures could be improved and the political boundary conditions should be reduced.

Jacques Colas (E.T.): It will be very interesting. Currently no ASPERA R&D call has been open for ET and there is a clear need for R&D to prepare for the next generation of GW detectors.

Uli Katz (KM3NeT): Useful, but at the current volume it cannot replace, as an instrument, the standard national (and EU) funding channels. I see it as a "urgency help" instrument to support upcoming projects in bridging gaps of support and funding, but not as a steering instrument to shape the science landscape.

b. What should be topics/priorities for further calls?

Ralph Engels (Auger): The development of highly efficient photosensors is an important topic.

Jacques Colas (E.T.): E.T.

Uli Katz (KM3NeT): This is volume-dependent.

c. Is there any urgent R&D topic related to your project?

Ralph Engels (Auger): The development of highly efficient photosensors is an important topic.

Jacques Colas (E.T.): E.T. needs support to develop technologies that aren't included (or only marginally) in the ILIAS call because they are not related to underground facilities, like optics, laser, materials, ...

Hans Kraus (EURECA): The common call is a very good start and clearly a move in the right direction. Its budget could have been somewhat larger. Perhaps this instrument could be developed towards funding construction of whole projects, not only design studies and R&D. The impact of common calls as a clock to synchronize a European-wide write-up for a project is very much appreciated.

The question which topics should go next is difficult to answer as there appears still no consensus between the participating countries as to what is within Astroparticle Physics and what not. Sorting this out appears to be an area that should move up to high priority.

I would seem there is always an urgent need for R&D in any project. Again this is a matter of definition. If R&D means the work that should have been done before moving to the design of the experiment, the answer is "No". If R&D means continuous improving of the technique where still possible (before designs get frozen), then "Yes" in quite many areas.

Uli Katz (KM3NeT): Yes, prototyping and test activities for KM3NeT beyond the Design Study

3. Do you have any wishes/requests to the funding agencies incl. EU beyond "give money!"?

Ralph Engels (Auger): ASPERA should get in contact with the projects and work out and communicate with is of really high strategic importance.

Werner Hofmann (CTA): CTA hopes to get help on the organisational setup, support on the governmental level as well as diplomatic support.

Jacques Colas (E.T.): Increase interest to the 7 magnificent, as said before.

Hans Kraus (EURECA): Provide general, common guidelines and model contracts, MoUs, etc, that help with running a larger collaboration. As it stands now, quite a few physicists, who clearly are experts in their own areas but not in drafting collaboration agreements, etc spend much of their time with exactly this. It would be very useful to have such model documents, perhaps two or three, depending on size and scope of the collaboration, which one then can adapt to the specific experiment.

Uli Katz (KM3NeT): Yes: Seriously cross-coordinating the Magnificent 7 and possibly other projects, with a European rather than diverging national views, supporting a strong European role in research infrastructures.

4. Chances and benefit from networking with existing organisations (i.e. CERN and ESO). Is there any project you have identified that you would like to carry out in partnership/collaboration with CERN and/or ESO?

Eugenio Coccia (COMAG): For the Underground labs it is important to cooperate with CERN.

Werner Hofmann (CTA): CTA would like to rely on technological solutions made by ESO.

Jacques Colas (E.T.): Currently, no.

Hans Kraus (EURECA): The access and use of existing structures at CERN is important. The main benefit we could get from CERN is regarding organization, common purchasing, a meeting place, etc. We could of course build a parallel structure for Astroparticle Physics, but this raises many questions. The much more efficient way seems to be that CERN opens up to Astroparticle Physics. There are already signs of this, but there might be benefit from pushing for this more strongly.

Uli Katz (KM3NeT): For KM3NeT, we could imagine and would very much welcome a CERN involvement at various possible levels of intensity - from scientific/technological advice and reviewing to a real partnership for construction.

André Rubbia (LAGUNA): For a project like LAGUNA it is important to have a partnership with CERN on neutrino beams.