



Astroparticle Physics European Consortium

The Mount Elbrus Conference From Deep Underground up to the Sky

~~Terskol~~ Pyatigorsk

Tuesday 12 September 2017 – Friday 15 September 2017



Thomas Berghöfer,
Francesca Moglia
APPEC



The Mount Elbrus Conference

is jointly organized by

- JINR (Joint Institute for Nuclear Research) in Dubna,
- Institute for Nuclear Research of the Russian Academy of Sciences,
- Lomonosov State University in Moscow,
- Kabardino-Balkarian State University,
- Irkutsk State University, and
- APPEC (Astroparticle Physics European Consortium)

A great thank you to the local organizers!



Communiqué

By the participants of the ASPERA Town Meeting

Held at the Joint Institute of Nuclear Research (JINR) in Dubna, Russia



On September 14, 2012, more than 50 scientists and representatives of funding agencies came together for a one day ASPERA Town Meeting at the Joint Institute of Nuclear Research (JINR) in Dubna, Russia. To represent Russia, the Russian Foundation for Basic Research joined the European network of funding agencies in Astroparticle Physics (ASPERA) last year. Consequently, the main purpose of the meeting was to present the current Astroparticle Physics (ApP) programs in Russia and Europe, to identify areas of common interest, and start discussing the strategy of future common activities. Representatives of the French, German, and Italian embassies in Moscow have been present during the meeting.

For this meeting all major Russian stakeholders in ApP came together at the JINR. Members of ASPERA informed their Russian colleagues about the current status of the creation of ApPEC, the Astroparticle Physics European Consortium, which shall form a sustainable structure carrying further the coordinating work of ASPERA. It was agreed that JINR should become an observer in ApPEC, a status similar to other European organizations like CERN, ESA, and ESO. Furthermore, a Russian organization should become a partner of ApPEC. A discussion among all relevant stakeholders providing funding for ApP or involved in policy making in Russia shall initiate a decision.

Both sides confirmed the fostering of common research projects, the growing importance of an interdisciplinary linking of ApP activities, the relations to industry, and the necessity to attract young scientists and the training in this science topic.

The numerous scientific presentations given during the ASPERA Town Meeting by European and Russian

shall define a first and important step towards implementation of a common roadmap in Europe and Russia.

In general, the European community, represented in Dubna by the ASPERA leaders and participants, recognizes the importance of efforts of Russian colleagues in the development of a Russian strategy in ApP and preparation of a Russian roadmap.

As result of the ASPERA Town meeting in Dubna it has been agreed to set up three working groups to

1. formalize the relationship on agency level that a Russian partner joins ApPEC and JINR receives observer status,
2. define a common action plan for the study of rare processes underground and underwater in neutrino physics and direct dark matter searches, and
3. elaborate a fostering of collaboration between Russian and European scientists and institutions in studying the high-energy universe (cosmic rays, high-energy gamma rays, neutrinos, and gravitational waves).

Co-chairmen of the meeting:

T.Berghöfer

V.Matveev

Ad 1: WG (Matveev, Berghöfer) came to the conclusion that JINR joins APPEC as full partner (in 2013)

Ad 3: Conference in 2016 at Lake Baikal,

Ad 2: Conference now near Baksan Neutrino Observatory



APPEC

- is the European consortium of
 - Ministries,
 - Funding Agencies,
 - or their designated national institutions
- (re)founded in 2012
- developed within the EU projects ASPERA/ASPERA-2
- is a new innovative structure in science
- acts commonly but with a distributed setup

Partners of APPEC



APPEC 2017

RIA (Ireland)

STFC (UK)

FOM (NL)

FRS-FNRS, FWO (Belgium)

CEA, CNRS (France)

SNSF (Switzerland)

LSC (Spain)

FCT (Portugal)

Observers: CERN, ECFA, ESO

OSI (Finland)

VR (Sweden)

DESY, KIT (Germany)

JINR (Dubna)

NCN (Poland, observer)

INFN (Italy)

IFIN-HH (Romania)

CSF (Croatia, observer)

Distributed responsibilities of the five APPEC Functional Centres



DESY:
International Contact,
Computing, Industrial
Relations, Common
Fund / Archive

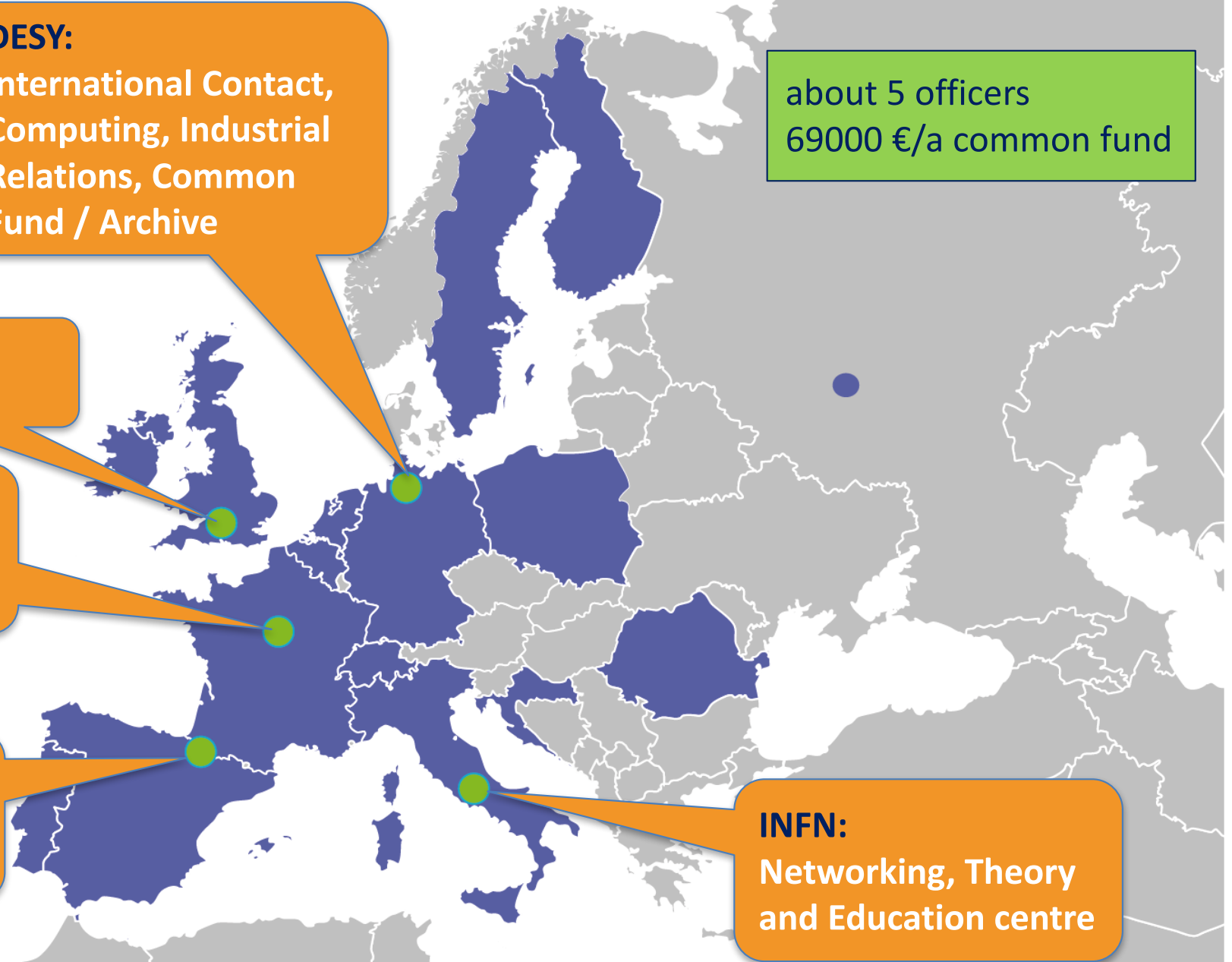
about 5 officers
69000 €/a common fund

STFC:
Outreach

APC:
Strategic Actions,
Interdisciplinarity

LSC:
Electronic Tools
and Web

INFN:
Networking, Theory
and Education centre





TOPICS of the conference

- **Astroparticle physics in Deep Underground Laboratories:**
 - Direct Dark Matter searches
 - Neutrino property measurements
 - Neutrino astronomy in the low energy regime
 - Axion searches
 - Nuclear astronomy in Underground Labs
- **Multi-messenger aspects related to these topics**
- **Novel ideas and synergies with other fields of science**
- **Upcoming experimental opportunities in Russia, Europe and beyond**
 - Next generation atmospheric neutrino detectors
- **Theory and modelling**



Astroparticle Physics for Europe **and beyond**

Thanks for your attention!

<http://www.appec.org>

appec@desy.de