



Astroparticle Physics European Consortium

General Assembly

4 May 2023

report from GA chair

Topics addressed in chair's report:

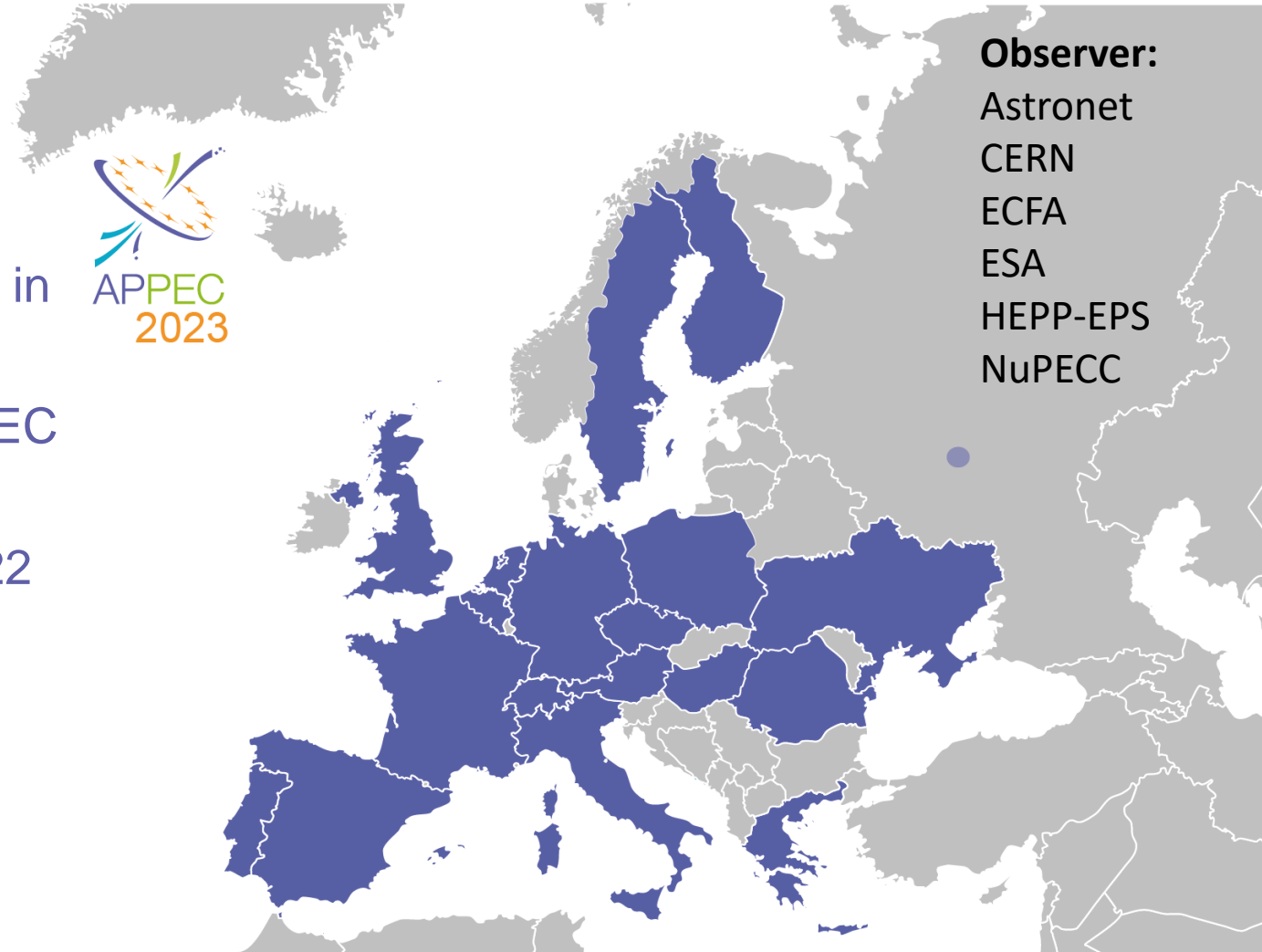
- **HEP Sustainability Report**
- **ACME**
- **JENA Computing Workshop**
- **Next GA meetings**

main topics today:

- **APPEC midterm review**
- **Status APPEC MoU**

AstroParticle Physics European Consortium

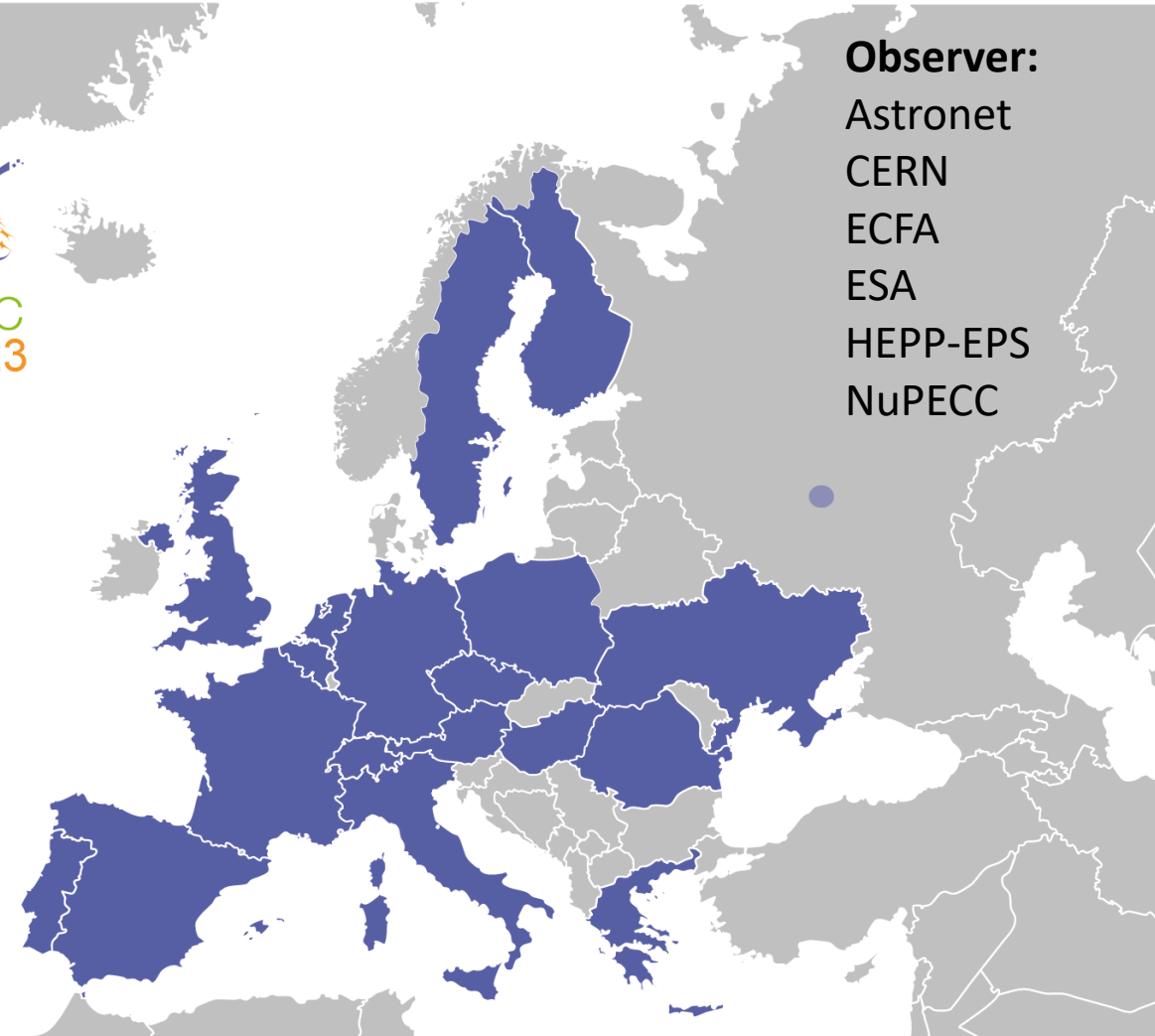
- an international coordinating structure, founded in 2012
- Based on MoUs by all partners and an APPEC Common Fund with c. 70k€/year
- 18 (+1 suspended) member countries with 22 funding agencies
- 3 bodies:
 - General Assembly with Observers
 - Scientific Advisory Committee;
 - Joint Secretary



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Intensifying efforts
for Denmark



Observer:
Astronet
CERN
ECFA
ESA
HEPP-EPS
NuPECC

APPEC, summary of current activities

- APPEC roadmap update: **Main topic today**
- Renewal of the APPEC MoUs: **second main topic today**
- INFRA-2023-SERV-01-02: Common Proposal with European Astronomy (ACME) submitted: **slides**
- JENA Computing Workshop: 12-14/6/2023 in Bologna, Italy: **slides**
- HECAP Sustainability Report: **slides**
- “Evaluation” of JENA Eols <http://www.nupecc.org/jenaa/?display=eois> (the ENA chairs will follow closely the activities)
- ESFRI Landscape Analysis (APPEC Input submitted early April): **see attached document**
- ECFA Detector R&D Implementation <https://indico.cern.ch/event/957057/page/27294-implementation-of-the-ecfa-detector-rd-roadmap>
- NuPECC Long Range Plan: 153 inputs <https://indico.ph.tum.de/event/7050/contributions/> – now wg-sessions
- ASTRONET Roadmap: glossy brochure <https://www.astronet-eu.org/> and long version in print
- SNOWMASS / P5: APPEC presentation at Town Hall meeting <https://indico.physics.lbl.gov/event/2382/>
- IYBSSD: <https://www.iybssd2022.org/en/home/> (closure event @CERN 6/10/23): **action?**
- Stavros Katsanevas Symposium 1/6/2023 <https://indico.in2p3.fr/event/29126/program>
- Support of Astroparticle Physics in Ukraine: **needs action!**
- **Next GA meetings**

Astrophysics Centre for Multimessenger studies in Europe (ACME)

HORIZON-INFRA-2023-SERV-01-02

- Topic: **better access of users to RI services to advance frontier knowledge**, activities to improve and harmonize the access, and training for scientists.
- Maximum EU contribution per project: 14.5 million euros.
- Scientific domain of interest: Astronomy & Astroparticle physics.
- Submission on March 9th, feedback expected in September

Objectives: The Astronomy and Astroparticle physics research infrastructures involved in this proposal will lay the foundations for building a new ecosystem for a deepened, stronger and long-term vision collaboration with the aim to:

1. implement the **European roadmaps'** recommendations and act as a pathfinder to broaden, improve and align the accesses to the respective RI services and data
2. provide a harmonized **transnational and virtual access** to world-class RIs
3. develop **centers of expertise**
4. improve the **science data products** management
5. develop and improve interoperable **cyberinfrastructures** for alert sending and better manage **coordinated observations**
6. provide **training** for a new generation of scientists and engineers
7. open the astrophysics data sets to other disciplines and increase **citizen engagement** in scientific research

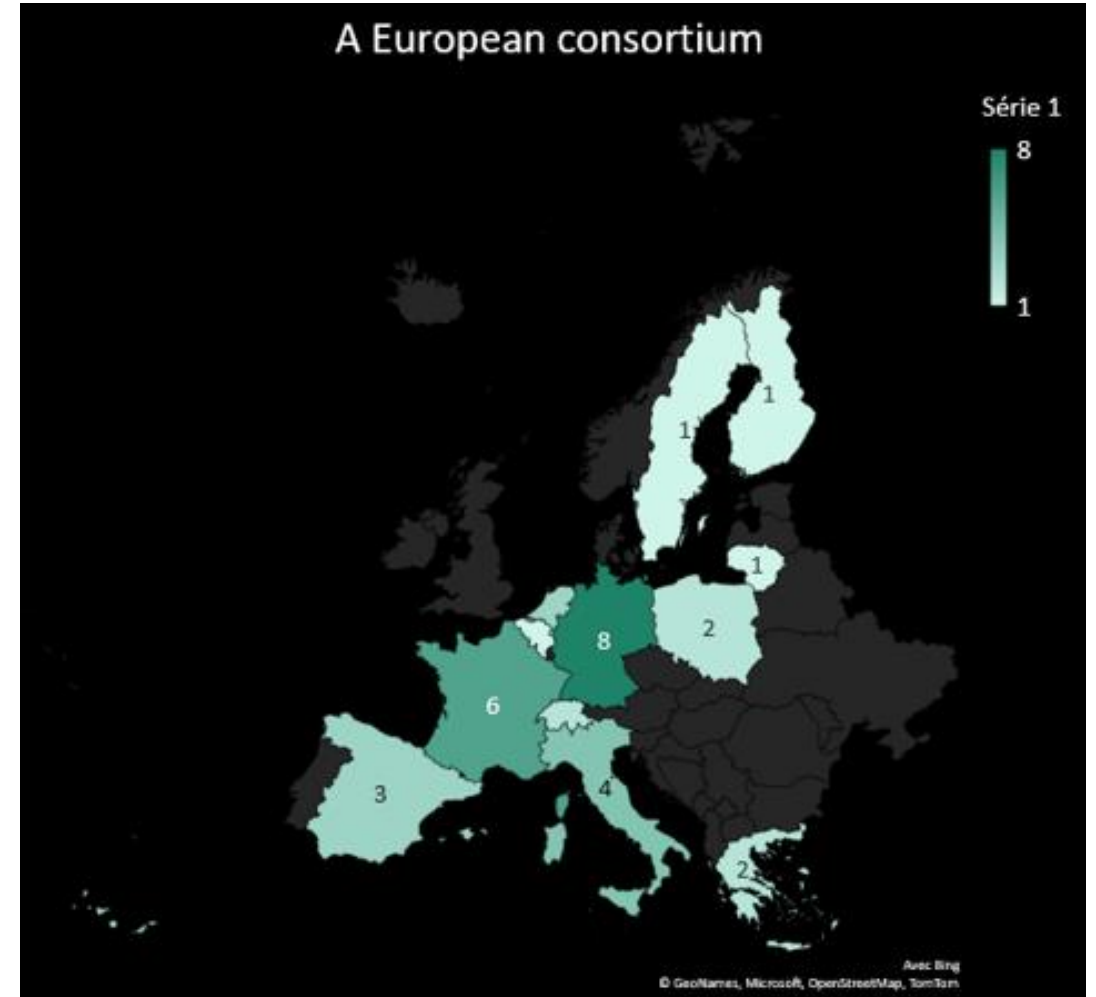
7 Work Packages (WP) corresponding to the objectives above

Consortium: 41 partners, 15 countries, over 30 research infrastructures (observatories and detectors, cyberinfrastructures and expertise centers) from Astronomy and Astroparticle domains, covering GW, Gamma & X-rays, neutrinos, CR, radio, optical.

Astroparticle & Astronomy institutions

Centre National de la Recherche Scientifique
 Université Paris Cité
 Canada France-Hawaii Telescope
 Université Paul Sabatier Toulouse III
 Observatoire de Paris
 Université Catholique de Louvain
 Max-Planck Gesellschaft zur Förderung
 Deutsches Elektronen Synchrotron
 Commissariat à l'Energie Atomique et aux
 Energies Alternatives
 Narodowe Centrum Badan
 The University of Manchester
 Gran Sasso Science Institute
 Université de Genève
 Joint Institute for Very Long Baseline
 Friedrich Alexander Universität
 Instituto de Fisica de Altas Energias
 The Open University
 Bergische Universität Wuppertal
 Istituto Nazionale Di Astrofisica
 Ethniko Asteroskopeio Athinon
 European Gravitational Observatory

Karlsruher Institut für Technologie
 Ludwig Maximilians Universität
 Stichting Nederlandse Wetenschapp
 University of Cambridge
 Uppsala Universitet
 Stichting International Lofar
 Institut de Radio Astronomie
 Istituto Nazionale di Fisica Nucleare
 Universidad de Santiago de Compostella
 Humboldt Universität Zu Berlin
 Ventspils Augstskola
 Centro Nacional de Informacion
 Cherenkov Telescope Array
 The Queen's University Of Belfast
 Uniwersytet Mikolaja Kopernika
 Aalto University
 Ecole Polytechnique Fédérale de Lausanne
 Aristotelio Panepistimio Thessalonikis
 Taras Shevchenko National
 Institute of Radio Astronomy of Kharkiv



JENA Computing Workshop



- JENA Computing Workshop in Bologna, Italy: 12-14 June 2023
 - <https://agenda.infn.it/event/34738/>
 - JENAS 2022: There is a need for a European Workshop on (federated) Computing!
 - Covering all aspects of (federated) computing by talks, round table discussions, initiation of JENA working group, ..
 - Mainly in-person, expected c. 100 participants, by invitation, place for c. 20 APPEC delegates (please name your national computing experts)
 - Moderate fee (150 €)
- APPEC representatives for expert members in organization committee are **Stefano Bagnasco (Torino)** and **Gonzalo Merino (PIC)**

JENA Computing Workshop

12 Jun 2023, 12:00 → 14 Jun 2023, 18:00 Europe/Rome

Auditorium Biagi (Biblioteca Salaborsa)

Andreas Haungs (Karlsruhe Institute of Technology), Claudio Grandi (Istituto Nazionale di Fisica Nucleare), Luca Dell'Agnello (Istituto Nazionale di Fisica Nucleare)

Description

ECFA European Committee for Future Accelerators

NuPECC

APPEC

JENAA Joint ECFA-NuPECC-APPEC Activities

To be held as in-person meeting in Bologna, Italy.



Motivation

At the Joint ECFA-NuPECC-APPEC (JENA) Seminar in May 2022 in Madrid (<https://indico.cern.ch/event/1040535/>), both the plenary presentations and the closed session of funding agency representatives revealed that there is an increased need for discussions on the strategy and implementation of European federated computing at future large-scale research facilities.

HECAP Sustainability Initiative



- Sustainability In HECAP
- Document from Sep. 2022 (see at indico or web page)
- <https://sustainable-hecap.github.io/>
- Astroparticle Physics mentioned in title , but...
- Contacted the editors via given email address: hep-sustainability@protonmail.com (Peter Millington, UKRI)
- They would acknowledge contribution from APPEC, but we didn't got any timeline....

→ **Should we / will we interact with the initiators and contribute? And how we should organize that?**

Striving towards Environmental Sustainability in High Energy Physics, Cosmology and Astroparticle Physics (HECAP)

Important: Statement of intent

The climate crisis and the degradation of the world's ecosystems require humanity to take immediate action. Given this, the High Energy Physics, Cosmology and Astroparticle Physics (HECAP) communities have a responsibility to limit the negative environmental impacts of their research.

This **incomplete document** is being developed as part of a grassroots initiative *Striving towards Environmental Sustainability in High Energy Physics, Cosmology and Astroparticle Physics*. It is intended to be a synthesis of current data and best practices from research in climate science and sustainability, as applied to our field to the best of our ability as physicists, and a reflection on the roles that our community can play in limiting negative environmental impacts due to our research work and scientific culture. Its scope is inspired by the holistic approach of annual environmental reports of major institutes, which include emissions directly related to research and collateral emissions, such as from personal commutes and institutional catering. Addressing this broad scope requires input from across the community, in particular to identify the technical challenges of limiting the environmental impacts of our current and future research infrastructure. **We need your help to complete it.**

Next GA meetings

- GA 2-2023: 28/29 June 2023 in Warsaw, Poland (face-to-face) -- Leszek Roszkowski
 - Wednesday afternoon arrival and GA meeting part 1, dinner
 - Thursday morning ceremonial event with ministry level to celebrate
 - Re-enter of Poland in APPEC (2019)
 - Birthday of Copernicus
 - New Copernican Academy in Poland
 - ASTROCENT is entering a new era
 - Thursday afternoon GA meeting part II, departure
- GA 3-2023 late summer online ?
 - Topics to be defined
- GA 4-2023: late November, early December in Brussels, Belgium (face-to-face) -- Krijn de Vries, Giacomo Bruno
 - Usual GA meeting
 - Attached an event with EU commission, press and representatives of funding agencies to present the roadmap update (discussed later)