

Report from Chair General Assembly

Astroparticle Physics European Consortium

Topics addressed in chair's report:

- Stavros memorial event
- JENA Computing Workshop
- ESCAPE and future
- JENA Eol
- HEP Sustainability Report
- Short information on:
 - APIF, ACME, IYBSSD2022, NuPECC, ECFA
- Next GA meetings (Brussels)

Dedicated topics this GA:

- Celebratory Event: APP in Poland
- APPEC Roadmap Update
- APPEC MoU
- Strategy DUL
- GWIC report
- EuCAPT report
- Astronet report

Symposium Stavros Katsanevas

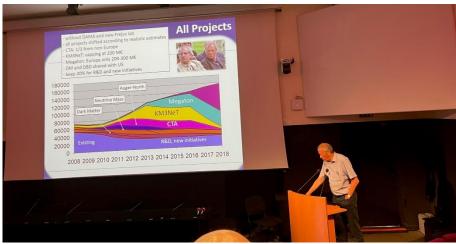
https://indico.in2p3.fr/event/29126
June 1, 2023 - APC
Thank you for this nice event!

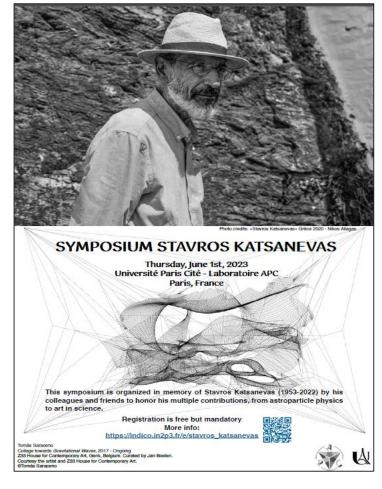












* 1953, Athens † 27 November 2022, Pisa

Symposium Stavros Katsanevas

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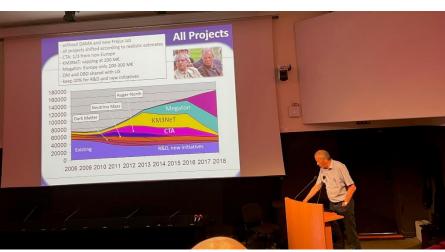
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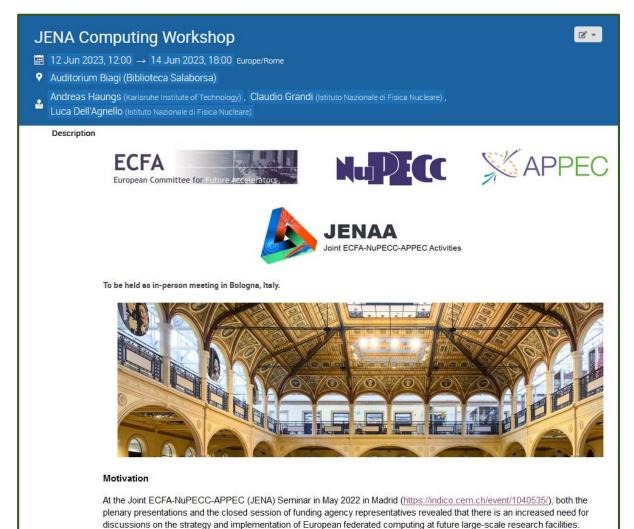


JENA Computing Workshop





- JENA Computing Workshop in Bologna: 12-14 June 2023
- https://agenda.infn.it/event/34738/
- Motivation: JENAS 2022 → There is a need for a European Workshop on (federated)
 Computing! → Preparation for JENAS 2025
- 60-70 participants plus up to 25 online
- Topics are all aspects of (federated)
 computing by talks, round table discussions,
 initiation of JENA working group, ...
- Covering computing, HPC vs. HTC, software, data management, open data, sustainability



JENA Computing Workshop





Results:

- Dedicated working groups (to look deeper) on five areas:
 - HPC integration in the HTC federated infrastructures
 - Software and Heterogeneous Architectures
 - Federate Data Management, Virtual Research Environments and FAIR/Open Data (=ESCAPE?)
 - Machine Learning and Artificial Intelligence
 - Training, Dissemination, Education.
- → APPEC representatives for expert members in organization committee (and working group) are Stefano Bagnasco (Torino) and Gonzalo Merino (PIC)

→ Next:

- → Searching for participation in the working groups from Astroparticle Physics
- **→** Contact ESCAPE
- → Building the WGs with dedicated meetings









ESCAPE









- EOSC is the European Commission action in response to EU member states' shared policy about the uptake of Open Science
- ESCAPE The European Science Cluster of Astronomy & Particle Physics ESFRI Research Infrastructure (48 months; 1/2/2019-31/1/2023)
- Closure Event: October 2022
- APPEC (chair) is member of the External Advisory Board: (report & recommendations;
 Support letter for future activities)
- Recently, all of the 5 EOSC Science Clusters have put in place long-term structures through MoU or Collaboration Agreement plus H2020 and potential Horizon Europe funded actions (or other funding)
- ESCAPE has Collaboration Agreement signed by all the partner RIs
- From 1st Feb 2023 ESCAPE is an Open Collaboration :Collaboration will be a community with common interests and synergies
- ESCAPE 1st Open Collaboration meeting 7/07/23 (open to all) https://indico.in2p3.fr/event/30249/
- → cooperation between JENA computing WG and ESCAPE?
- → Broader APPEC participation on the Open Collaboration?



https://projectescape.eu/

Christophe Arviset, ESA – European Space Agency
Andreas Haungs, Chair of APPEC - Astroparticle Physics European Coordination committee
Karl Jakobs, Chair of ECFA - European Committee for Future Accelerators
Marek Lewitowicz, Chair of NuPECC - Nuclear Physics European Collaboration Committee
Colin Vincent, Chair of ASTRONET Board - Astronomy European Collaboration



JENA Activities





http://www.nupecc.org/jenaa/?display=eois

Expression of Interests (EoI)

- 1. Dark Matter iDMEu (https://indico.cern.ch/event/869195/overview)
- 2. Gravitational Waves for fundamental physics (https://agenda.infn.it/event/22947/overview)
- 3. Machine-Learning Optimized Design of Experiments MODE (https://mode-collaboration.github.io)
- 4. Nuclear Physics at the LHC (https://indico.ph.tum.de/event/4492/)
- 5. EDM Search of Charged-Particle Electric Dipole Moments (https://indico.ph.tum.de/event/4482/)
- 6. Synergies of EIC with LHC EIC; kick-off happened in June 2022 https://indico.ph.tum.de/event/7004/
 - Very good presentations at JENAS (all are validated as community overarching networks)
 - ENA chairs discuss with all Eol leads separately the status, plans, requests and schedule for 2023 in mid January → more or less approval of the Eols (#6 some problems with start)
 - At JENA Computing Workshop idea of new Eol: machine learning as analysis tool (Sascha Caron, NIKHEF)
 - APPEC Eol representatives in 1., 2., 3., 4., 6. (do we need reconsidering these persons?)

HECAP Sustainability Initiative



- Sustainability In HECAP
- Document from Sep. 2022 https://sustainable-hecap.github.io/
- Astroparticle Physics mentioned in title, but...
- Contacted the editors via given email address: <u>hep-sustainability@protonmail.com</u> (Peter Millington, UKRI)
- They would acknowledge contribution from APPEC, but difficulties with timeline....
- Publication on arXiv on 5/6/2023 https://arxiv.org/abs/2306.02837
- → had presentation at the JENA Computing Workshop from one of the authors
- → Should we and how further interact with the initiative? And how we should organize that?

Environmental sustainability in basic research

A perspective from HECAP+

arXiv:2306.02837v1

Abstract

The climate crisis and the degradation of the world's ecosystems require humanity to take immediate action. The international scientific community has a responsibility to limit the negative environmental impacts of basic research. The HECAP+ communities (High Energy Physics, Cosmology, Astroparticle Physics, and Hadron and Nuclear Physics) make use of common and similar experimental infrastructure, such as accelerators and observatories, and rely similarly on the processing of big data. Our communities therefore face similar challenges to improving the sustainability of our research. This document aims to reflect on the environmental impacts of our work practices and research infrastructure, to highlight best practice, to make recommendations for positive changes, and to identify the opportunities and challenges that such changes present for wider aspects of social responsibility.

Version 1.0, 5 June 2023

Please read this document in electronic format where possible and refrain from printing it unless absolutely necessary. Thank you.





- APIC & APIF: discussions with Roger Blandford and the IUPAP/C4 commission
- APIF was established by the Organization for Economic Co-operation and Development's Global Science Forum, which is a committee of senior science policy officials of OECD member and observer countries. The Global Science Forum was acting on one of the final recommendations of its Working Group on Astroparticle Physics, whose report is available here.
- After some discussions and dedicated IUPAP/C4 discussion I've got following answer:

Dear Andreas,

I can confirm that APIF will be dissolved henceforth.

We will do this on a high note as it has contributed so much to fostering the Astroparticle community.

However the world has moved on and so must we.

The colleagues from whom I have heard are in agreement with this step.

I would be very grateful if you could go out your way to accommodate those of my APIF colleagues who have a European connection. They can contribute much to APPEC.

With best regards, Roger

→ How to continue at this point?

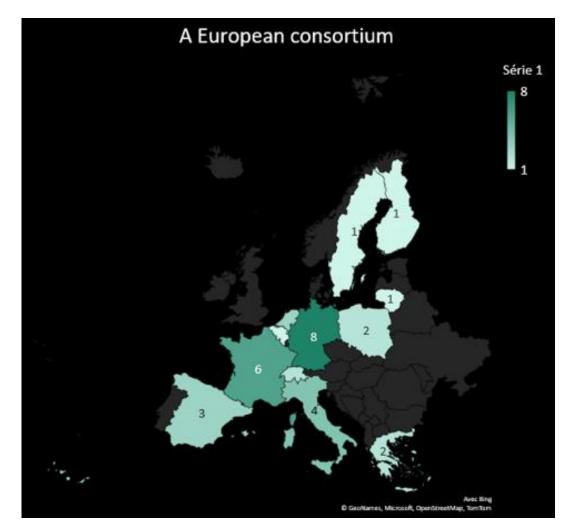
ACME



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
- Consortium: 41 partners, 15 countries, >30 research infrastructures



IYBSSD2022

https://www.iybssd2022.org/en/home/









- APPEC is partner (10k€)
- several flagship events
 - Opening Ceremony: July, 8, 2022; UNESCO Paris
 - Asia: Rencontre de Vietnam (Tran van Tanh) Sept 2022
 - Europe: Belgrad: September 20-22 2022: worldacademy.org/world-conference
 - Latin-America: Honduras, everything unclear as new government expected, Argentina involved
 - Afrika: Cape Town 6-9 December 2022, world science forum (every 4 years: 2018 Budapest, 2014 Jordan): https://worldscienceforum.org/
- Still possibility to propose relevant activities for calendar
 - → APPEC has not done much, chance for visibility at closing event
 - → Closing event @CERN: 15 December 2023
- Toward an International Decade of Science for Sustainability
 - Online Workshop 27 June 13:30 15:30 UTC
 - organized within the Sustainability Research and Innovation 2023 congress held in Panama https://www.iybssd2022.org/en/events/toward-an-international-decade-of-science-for-sustainability/.

IYBSSD2022 leadership

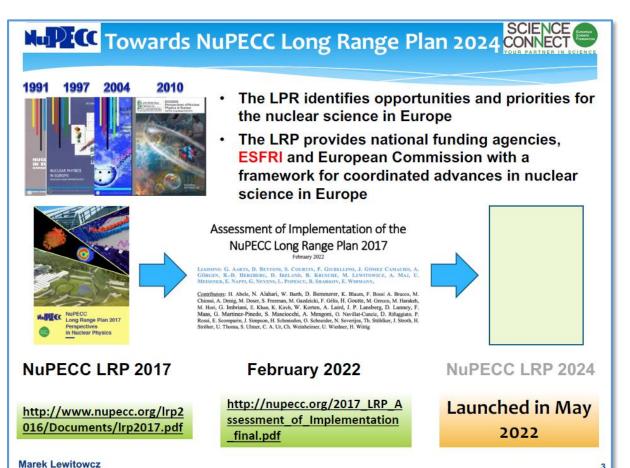


The International Year of Basic
 Sciences for Sustainable
 Development 2022 will put the spotlight on the links between the basic sciences and the Sustainable Development Goals. It will be a key moment of mobilization to convince economic and political leaders, as well as the general public, of their importance.

NuPECC Long Range Plans







- Dedicated steering committee established (APPEC chair is member of the SC)
- May 2022: Call for inputs from the community October 2022: More than 120 inputs from community (also several from APP community)
- 10 Thematic working groups established
- Early 2023: Meetings of thematic WGs, see https://indico.ph.tum.de/category/61/
- Recommendations drafting session @ GSI 30-31/10/2023
- November 2023 January 2024: Layout and editing of the LRP Draft, then community feedback
- May 2024: Town Meeting presentation and feedback from the community
- November/December 2024: LRP presentation in Brussels

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ECFA





- Implementation of ECFA R&D Detector Roadmap
 - End 2022: Detector R&D Roadmap Task Forces organised community meetings to establish the scope and scale of the community wishing to participate in the corresponding new DRD activities
 - Early 2023: DRDC mandate and composition defined by CERN management
 - EDP mandate plus membership updated: APPEC nomination of one seat in EDP: Aldo lanni
 - Summer 2023: **DRD proposals** based on the detector roadmap and community interest in participation with light-weight organisational structures and work plan for R&D programme to start in 2024
 - Autumn 2023: Review of proposals leading to recommendations for formal establishment of the DRD collaborations
 - End 2023: Discussion of approval by the CERN Research Board
 - 2024: New structures operational, ramp-up of resources throughout 2024 2025
 - Many meetings happend for all the coming DRDs, see https://indico.cern.ch/category/12772/
 - → Still participating possible in the various DRD (including detector training panel) for groups/individuals from astroparticle physics

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Next GA meetings



- GA 2-2023: 28/29 June 2023 in Warsaw, Poland (face-to-face + online)
- GA 3-2023 late summer online ?
 - Topics to be defined
- GA 4-2023: late November, early December in Brussels, Belgium (faceto-face) -- Krijn de Vries, Giacomo Bruno
 - Usual GA meeting
 - Elections?
 - Attached an event with EU commission, press and representatives of funding agencies to present the roadmap update (discussed later)

News:

- 29/6/2023 19:30 CEST: embargo lifting: IceCube neutrinos from the Milky Way https://indico-sfb1491.epp.physik.tu-dortmund.de/event/5/
- 29/6/2023: https://nanograv.org/news/2023Announcement of the Pulsar Timing Arrays community