



APPEC activities

Xin Wu (UNIGE)
Swiss Scientific Delegate to APPEC

CHIPP Plenary meeting,
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**UNIVERSITÉ
DE GENÈVE**

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APPEC: AstroParticle Physics European Consortium

- APPEC (created in 2012) is a consortium of funding agencies, national government institutions, and institutes from **17 European countries**, responsible for coordinating and funding national research efforts in astroparticle physics. (<https://www.appec.org>)
- **General Assembly** : strategic and decision-making supervisory body
 - Consists of ~25 delegates representing participating agencies/institutes
 - Swiss participating body: SNSF
 - Thomas Werder: SNSF
 - Xin Wu: elected by CHIPP board approved by SNSF (from Sept. 2019, for 2y)
 - GA chair: T. Montaruli (Geneva U., until end 2020, mandate is 2 years not renewable)
- **Joint Secretariat**: executive body
 - Distributed functional centres (DESY, NWO, KIT, APC, EGO)
 - General Secretary: Job de Kleuver (until end 2020)
- **Scientific Advisory Committee**
 - Chair: S. De Jong (Radboud U)
 - vice-Chair: S. Pascoli (Durham U)
 - Laura Baudis (Zurich U) is a member (chair until June 2020)
- **Observers**: CERN, ECFA, NuPPEC, ESO, ASTRONET



Recent activities: General Assembly Meeting Dec. 3, 2019

- Approved the accession of Poland (CAMK)
- A team led by Teresa was nominated to prepare APP input for EPPSU update
- Decision on "Path towards sustainable APPEC" (**Central office or not**) was postponed
- Endorsed the draft report on by the SAC on the Neutrinoless double beta decay
 - <https://arxiv.org/abs/1910.04688>
 - <https://www.appec.org/news/neutrinoless-double-beta-decay-report-from-the-appec-committee>
 - **Recommendation 1.** *The search for neutrinoless double beta decay is a top priority in particle and astroparticle physics.*
 - **Recommendation 2.** *A sustained and enhanced support of the European experimental programme is required to maintain the leadership in the field ...*
 - **Recommendation 3.** *A multi-isotope program at the highest level of sensitivity should supported in Europe ...*
 - ...
- Endorsed a SAC mandate to create a Direct Dark Matter Searches subcommittee and its composition (chair Leszek Roszkowski)
 - **Report expected for the Dec. 2020 GA meeting**

Recent activities: General Assembly Meeting June 3, 2020

- "Path towards sustainable APPEC" (**Central office or not**)
 - Given the Covid situation, it was decided to further develop a detailed plan for a distributed APPEC workforce
- Appointed Sijbrand de Jong as chair of the APPEC SAC for a term of two years, starting 1 July 2020 (renewable once)
- Report on follow-up actions on the implementation of the recommendations on the Neutrinoless double beta decay by the Chair (T. Montaruli)
 - Dedicated meeting soon with involved agencies (also US)
- Participation in the Snowmass 21 process: APPEC representative Berrie Giebels
- Presentation from the EuCAPT (The European Consortium for Astroparticle Theory) director G. Bertone
 - Now >100 institutes are interested to join EuCAPT
- Presentation on the status of the preparations of the ESFRI (European Strategy Forum on Research Infrastructures) application for **Einstein Telescope** by Michele Punturo
 - (Submitted in Sept. 2020, with ~40 institutions from 11 countries, including University of Geneva. There is also an Action to install a board at ministry level.)
- Call for nominations for a new chair and a new General Secretary
 - Election at the December 2020 GA meeting
 - Switzerland nominated Tony Riotto (member of steering committee of EuCAPT)

Recent activities: Neutrinoless double beta decay, etc.

- A dedicated meeting is organized for Nov. 3 2020 by the APPEC Chair (T. Momtaruli)
 - **Open session**
 - Status report on experiments (CUPID, LEGEND, NEXT) and on snowmass21 process
 - Directors of main underground labs have been invited
 - **Closed session**
 - **Discussion to develop a common view** only for APPEC GA delegates and SAC Chair and vice-Chair (also Chair of the panel who produced the SAC document)
 - **Comments are welcome**
- SAC is completing the document on the mid-term review of the 2017-2026 strategy implementation process (Strategy document: <http://www.appec.org/wp-content/uploads/Documents/Current-docs/APPEC-Strategy-Book-Proof-19-Feb-2018.pdf>)
 - **Draft will be discussed at the upcoming GA in Dec. 6 2020, finalized in 2021**
- **Please register to receive the very interesting APPEC Newsletters!**
 - <https://www.appec.org/latest-news/newsletters>

Recent activities: JEANAS

- JENAS (Joint ECFA-NuPECC-APPEC Seminar), first edition Oct. 14-16, 2019 in Orsay
 - Call of EoI issued on Oct. 18 2019 for synergy topics within the three communities
 - 5 EoIs received
- iDMEu (<https://indico.cern.ch/event/869195/overview>)
 - Initiative for Dark Matter in Europe and beyond: Towards facilitating communication and result sharing in the Dark Matter community
- Gravitational Waves for fundamental physics (<https://agenda.infn.it/event/22947/overview>)
 - A cross-cutting initiative for common platform related to GW
- MODE (<https://userswww.pd.infn.it/~dorigo/MODE.html>)
 - Machine-Learning Optimized Design of Experiments
- Nuclear Physics at the LHC (<https://indico.ph.tum.de/event/4492/>)
 - A unique doorway to investigate the hyperon-puzzle in neutron stars and to enable the search for dark matter in cosmic rays
- Storage Rings for the Search of Charged-Particle Electric Dipole Moments (EDM) (<https://indico.ph.tum.de/event/4482/overview>)
- Task Force representatives from APPEC, ECFA and NuPECC forms
 - All EoI and individual EoI kick-off meetings held in Aug-Sept. 2020

Recent activities: JEANAS

- Next step
 - Call for concrete applications for APPEC-ECFA-NuPECC funding for the 5 EoI
 - Deadline 23 November 2020
- Funding categories:
 - Support the organization of gatherings across communities on the EoI topic, e.g. workshops, town meetings, platforms for continuous discussions, ...
 - Support the dissemination of the EoI topic, e.g. professional website, publications, outreach projects including city science projects, ...
 - Support to foster the cross-disciplinary research environments in a sustainable fashion.
- **Please inform, endorse and participate!**
 - Links on the previous page