

# C11 Annual Meeting

July 21, 2024



**Florencia Canelli**  
University of Zurich

<http://iupap.org/commissions/c11-particles-and-fields>

# C11 membership

## 2021-2024

**Florenca Canelli** (chair) (Switzerland) -

[canelli@physik.uzh.ch](mailto:canelli@physik.uzh.ch)

**Azwinndini Muronga** (vice-chair) (South Africa)

**Young-Kee Kim** (secretary) (US)

### Members

Alexander Sorin (Russia)

Nicole Bell (Australia)

Barbara Clerbaux (Belgium)

Marcelo Munhoz (Brasil)

Jana Bielcikova (Czech Republic)

Lydia Iconomidou-Fayard (France)

Srubabati Goswami (India)

Atsuko Ichikawa (Japan)

Roman Pasechnik (Sweden)

Franz Muheim (UK)

Isabell Melzer-Pellmann (Germany)

### Associate members

Oliver Stelzer Chilton (Canada)

Liangjian Wen (China)

Ana Machado (Brazil)

Taakaki Kajita (C4 chair)

Anu Aprahamian (C12 chair)

# C11 membership

New membership will be selected in October at the 33<sup>rd</sup> IUPAP General Assembly in Hainan, China for the Oct 2024 - Oct 2027 period

Selection is done by Executive IUPAP, Commission Chairs and Liaison Committees of Territorial Members

*Needs to fulfill various constraints over all Commissions in terms of territory and gender on top of issues related to subfields within each discipline*

**In executive session we will discuss the received nominations and prioritize the recommended names**

Contact all members:  
[IUPAP-C11-Members@cern.ch](mailto:IUPAP-C11-Members@cern.ch)

# IUPAP recent activities and plans

# International Decade of Sciences for Sustainable Development

- UN General Assembly declared 2024-2033 as the International Decade of Sciences for Sustainable Development (IDSSD) (<https://www.un.org/en/observances/international-decades>)
- The approval of the decade came as a sequel to the very successful International Year of Basic Sciences for Sustainable Development (IYBSSD, <https://www.iybssd2022.org/en/>) in which IUPAP played a key role
- IUPAP has the potential to contribute enormously to IDSSD and is seeking input via its Commissions to be discussed at the incoming General Assembly in October 2024.

## Ask widely ?

- If you have any feedback, please send an email to [IUPAP-C11-Members@cern.ch](mailto:IUPAP-C11-Members@cern.ch) and/or [canelli@physik.uzh.ch](mailto:canelli@physik.uzh.ch)



United Nations  
Peace, dignity and equality  
on a healthy planet

## International Decades



| Kalio, 9, swims underwater near a shell of giant clam. Beveridge Reef area, Niue. UNDP/V.Sokhin/2016

These are the international decades currently observed by the United Nations. The United Nations designates specific days, weeks, years and decades as occasions to mark particular events or topics in order to promote, through awareness and action, the objectives of the Organization. Usually, it is one or more Member States that propose these observances and the General Assembly establishes them with a resolution. On occasion, these celebrations are declared by the specialized agencies of the United Nations, such as UNESCO, UNICEF, FAO, etc., when they concern issues that fall within the scope of their competencies. Some of them may be later adopted by the General Assembly.

**2024–2033**  
International Decade of Sciences for Sustainable Development

A/RES/77/326

# International Year of Quantum Science and Technology 2025



- UN General Assembly proclaimed 2025 as the International Year of Quantum Science and Technology (<https://quantum2025.org/en/>).
- The proposal for this declaration was endorsed by many organizations throughout the world, including IUPAP (<https://quantum2025.org/en/partners/>). APS acts as the fiscal sponsor for IQ2025 (<https://quantum2025.org/en/sponsor/>).
- The C11 commission encourages scientists to become engaged within their local organization of and participation in the activities that will organized to celebrate IQ2025

## Ask widely ?

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# Conferences

# C11 approved conferences -2024

- A: International Conference of High Energy Physics (ICHEP2024) - 10000 participants, broad field of particle physics
- B: Large Hadron Collider Physics Conference LHCP 2024 (LHCP24) - 2024 participants, broad field of collider physics
- C: Higgs Hunting 2024 (HH2024) – 120 participants, topical
- C: International Workshop on Neutrino-Nucleus Interactions (NuInt2024) – 100 participants, topical

Lower requests than other years



# C11 main conferences (type A)

## Lepton Photon

- 2007 - Daegu
- 2009 - Hamburg
- 2011 - Mumbai
- 2013 - San Francisco
- 2015 - Ljubljana
- 2017 - Guangzhou
- 2019 - Toronto
- 2021 - Manchester
- 2023 – Melbourne
- 2025 – Madison
- 2027 – 1 bid

*For decision today*

## ICHEP

- 2008 – Philadelphia
- 2010 - Paris
- 2012 - Melbourne
- 2014 - Valencia
- 2016 - Chicago
- 2018 - Seoul
- 2020 – Prague (virtual)
- 2022 - Bologna
- 2024 – Prague
- 2026 – Natal
- 2028 – 2 bids

# C11 for decision today

ICHEP and LP bids expected  
3 or 4 years to optimize smooth  
transition among conferences  
organization

## **Type A**

ICHEP 2028 bids:

- Sweden
- Thailand

Lepton Photon 2025:

- United States

Lepton Photon 2027 bids:

- China

## **Type A or B**

Large Hadron Collider Physics 2025

- Taiwan

## **Type C** - asking for endorsement

- Higgs Hunting 2025
- EPS 2025 (asked for support but it is not allowed as it is considered a regional conference)

## TIPP CONFERENCE BYLAWS (Approved by the TIPP SC on 23/06/2021)

### Name, Objectives and Field of Interests:

The International Conference on Technology and Instrumentation in Particle Physics shall be referred to hereinafter as the TIPP Conference Series. It represents a science-driven cross-disciplinary conference, started in Tsukuba, Japan in 2009, which have been alternating between America, Europe and Asia: Chicago (2011), Amsterdam (2014), Beijing (2017), Vancouver (2021, online). The program focus is on the technology, detector development and instrumentation in particle physics, astro-particle physics and closely related domains. The TIPP shall aid in promoting close cooperation between particle physics and applications in other fields of science that may lead to transformational new technologies. This conference brings together experts from the scientific and industrial communities; it has been originally conceived as the "Rochester conference in Instrumentation".

### Organization, Location and Site Selection:

The TIPP Conference is organized under the auspices of C11/IUPAP and shaped with the help and support of the TIPP Steering Committee (TIPP SC). The latter ensures the long-term tradition and continuity of the TIPP conference series and is responsible for the future strategy. The conference takes place every third year rotating among the different continents and alternating with PISA and VIENNA Instrumentation conferences (by default, TIPP is held the same year as the INSTR conference in Novosibirsk). Due to the COVID, TIPP2020 has been exceptionally moved by one year ahead; the next conference will take place in 2023.

The TIPP SC, jointly with C11/IUPAP, is responsible for making call for proposals, 6 months ahead of the upcoming TIPP conference for the next one, and soliciting applications from institutions interested in hosting the next TIPP conference. All bids have to be presented by the proponents and discussed at the joint meeting of C11/IUPAP - TIPP SC meeting, which is held during the TIPP conference. The final decision for the next conference site location is based on the vote among the C11 members.

### Sponsorship and Support by C11/IUPAP:

TIPP Sponsorship and Support by the C11/IUPAP will likely be at the B level. IUPAP Sponsorship places requirements for open access, diversity and formal reporting. For more details, see:

<https://iupap.org/conferences/conference-policies/>

<https://iupap.org/who-we-are/internal-organization/commissions/c11-particles-and-fields/c11-meetings/>

### Committees:

#### Local Organising Committee (LOC):

- consists of the team proposing the conference bid: the Local Chair, and additional members with various tasks appointed by the Local Chair. The latter submits nomination of the General Chair of the conference, which is discussed by the TIPP SC and formally endorsed by the C11/IUPAP. The LOC assists the participants during all steps of conference preparation, registration phase in situ, and while in progress.

#### International Organizing and Program Committee (IPC):

# TIPP - Technology and Instrumentation in Particle Physics Conference

- There is a proposal for a new steering committee chair/committee
- Call for hosting TIPP 2026 closed. There are 3 bids: Taipei, Mumbai, Assisi
- Presentation from Maxim Titov (chair of TIPP steering committee) – decision by C11 during executive session

# Early Career Scientist Awards

## Early Career Scientist Award 2024

### Jennifer Ngadiuba

*For co-design, development and deployment of novel machine learning techniques to address complex elementary particle physics challenges with focus on ultra-fast real-time data analysis on hardware triggers and for model agnostic searches for beyond the Standard Model physics signals at the Large Hadron Collider.*



**Will be announced tomorrow in ICHEP newsletter and webpage**

## Early Career Scientist Award 2024

Ian Moul

*For the invention of novel jet substructure observables which have had a direct impact on the collider physics program, and for developing new effective field theory techniques to enable high precision calculations, including in multi-prong kinematics and in subleading soft and collinear limits.*



**Will be announced tomorrow in ICHEP newsletter and webpage**



# IUPAP Early Career Scientist Award 2024\*



The [Commission on Particles and Fields \(C11\)](#) of [IUPAP](#) solicits nominations of outstanding young experimental or theoretical particle physicists for the two 2024 Early Career Scientist Prizes.

The prizes, each consisting of an IUPAP medal and a cash (€1000) award, will be presented at the **42th International Conference on High Energy Physics, Prague**, on July 17 - 24, 2024.

Candidates for the prize should have a maximum of 8 years of research experience (excluding career interruptions) following the PhD. →

*After Feb 1 2016 - date of conferring PhD, not PhD defense*

Nominations for the IUPAP Particles and Fields Early Career Scientist Prizes:

- can be made by experimental or theoretical particle physicists who know the work of the nominee well and include a citation statement,
- should consist of a minimum of two and a maximum of three letters explaining the nominee's qualifications and scientific achievements, a complete CV, and a list of publications, and →
- include a proposed award citation of 50 words or less describing the contributions of the nominee.

*Includes the letter from the nominator – no more than 3 letter per candidate  
If there are more than 2 applications per candidate ask candidate to choose one set*

Recipients of IUPAP Awards are expected to meet the commonly held standards of professional ethics and scientific integrity. Nominators should include a statement saying that, to the best of their knowledge, there are no concerns that IUPAP should be aware of regarding the nominee satisfying this expectation.

The nominator should collect the material and upload it at <https://academicjobsonline.org/ajo/jobs/XXXX>

*In executive session we will review the call, steps, and planing for next award*

All material should be submitted before February 1, 2024 at 12:00pm CET.

\* Previously called IUPAP Young Scientist Prize

# Authorship in Large Experimental Collaborations



# Authorship in Large Scientific Collaborations in Experimental High Energy Physics

- C11 created a working group in 2025 to study the situation of the authorship in large collaborations with the aim of setting recommendations
- [https://iupap.org/wp-content/uploads/2021/03/WG\\_authorship\\_100105.pdf](https://iupap.org/wp-content/uploads/2021/03/WG_authorship_100105.pdf)
- 20 years later, is authorship an issue ? Are the recommendations still valid and relevant ? Should C11 create a new study ?
- Beate Heinemann is invited for this part of the discussion