

C11 Summary



July 10, 2022

Florencia Canelli
University of Zurich

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

What we do

Commission on Particles and Fields ([C11](#)) of the International Union of Pure and Applied Physics ([IUPAP](#))

Main activity is the supervision of international conferences as sponsored by IUPAP (ICHEP, LP, TIPP, etc..)

but also:

Supervise the International Committee for Future Accelerators (ICFA), Accelerator Science (WG14)

Reports on Authorship (2005) and Recognition in Large Collaborations (2008)

Discussion on "ranking of large Collaborations" together with ICFA, EPS-HEP, etc.. (2008)

Recent: Neutrino Panel (2018-2021)

Early Career Award (previously Young Scientist Prize) at ICHEP (every two years)

For the past couple of years, we collect and summarize best practices for virtual conferences for worldwide accessibility

C11 membership 2021-2023

*Thanks to the outgoing members: **Zhi-Zhong Xing, Mihoko Nojiri, Dezso Horvath, Johan Rathsmann, Antonio Zoccoli, Raymond Volkas, Marie-Helene Schune, Sergio F. Novaes, Brigitte Vachon***

*And special thanks to **Heidi Schellman** for 10 years of diligent service to C11!*

Florencia Canelli (chair) (Switzerland) - canelli@physik.uzh.ch

Azwinndini Muronga (vice-chair) (South Africa)

Young-Kee Kim (secretary) (US)

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)

Contact all members:
IUPAP-C11-Members@cern.ch

IUPAP major policies

- Ensure the free movement of scientists
- Encourage accessibility, gender and national balance in physics
- Have policies to prevent harassment of individuals or groups at conferences
- Advice and reporting on achieving these goals

30th General Assembly IUPAP – some resolutions



<https://iupap.org/who-we-are/internal-organization/general-assembly/30th-general-assembly/>

Awards

- The IUPAP renames its Young Scientist Prizes as **Early Career Scientist Prizes**. This change of name reflects that the prizes are not intended for “young” people in terms of chronological age but in terms of the stage of the career they are at. The IUPAP also approves that periods of **career interruptions should be excluded** when counting the years of research experience after the PhD to decide whether a person qualifies as an early career scientist or not.
- 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 IUPAP mandates its Commission chairs to guarantee that the pool of candidates for Commission and Early Career Scientist awards be **sufficiently diverse, particularly in terms of gender and other underrepresented groups and geographical regions** by monitoring the nominations, sending reminder, and/or extending deadlines if necessary.

Conferences

- Update the IUPAP current guidelines on good practice to cover **virtual (online) conferences**.
- Call upon all organizers of scientific meetings and conferences which include virtual participation to **take into strict consideration issues of accessibility restrictions** that continue to persist on the basis of geographical locations and either choose platforms with global access and worldwide footprint or include more than one way through which unhindered global participation.

News



IUPAP centennial celebrations are <https://iupap.org/centennial/>



Ongoing activities on the year of Basic Science and Sustainable Development <https://www.iybssd2022.org/en/about-us/>

IUPAP neutrino panel report



The IUPAP Neutrino Panel:

M. Sajjad Athar¹, Steven W. Barwick², Thomas Brunner^{3,4}, Jun Cao⁵, Mikhail Danilov⁶, Kunio Inoue⁷, Takaaki Kajita⁸, Marek Kowalski^{9,10}, Manfred Lindner¹¹, Kenneth R. Long¹², Nathalie Palanque-DeLabarrouille¹³, Werner Rodejohann¹⁴, Heidi Schellman¹⁵, Kate Scholberg¹⁶, Seon-Hee Seo¹⁶, Nigel J.T. Smith^{4,17,18}, Walter Winter¹⁰, GERALYN P. Zeller¹⁹, Renata Zukanovich Funchal²⁰

*Co-Chairs

Additional contributing authors:

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October 19, 2021

<https://arxiv.org/abs/2111.07586>

<https://www.iupapneutrino.org>

- IUPAP neutrino panel established to promote international cooperation in the development of experimental programs to study the properties of neutrinos.
- Combined effort under the supervision of the C4, C11 and C12
- Panel: **3 co-chairs from 3 regions, 19 members / 11 countries**
- **White paper:**
 - a) Cover the present status of the global neutrino physics program and the developments that can be expected on a 5 to 10-year time scale through a science driven white paper
 - b) Collect R&D and measures (including software development) that are required for the near-term (<10-year) and medium- to long-term (10-25-year) program to fulfil their potential
 - c) Collect feedback on a draft report from the community

Submitted to IUPAP C11 and General Council

IUPAP statement on the tragic events in Ukraine

- [IUPAP statement](#)
- [Use of IUPAP Affiliation at Conferences](#)
- [Resolutions regarding international conferences in this time](#)

We are consternated by the news regarding the Russian military offensive in Ukraine and the terrible consequences that this has on the lives of our colleagues in Ukraine. We extend our deepest sympathy and solidarity to them and to all the Ukrainian people at this difficult time. We praise the large number of Russian colleagues who have expressed their sympathy for their Ukrainian colleagues and demanded peace for their countries (e.g., see <https://trv-science.ru/en/2022/02/we-are-against-war-en/>)¹. In our 100th anniversary this year, we note the critically important historical role that IUPAP has always strived to play in bringing physicists together across political divides even during our most difficult years in the past. IUPAP continues to embrace and promote scientific collaboration across the world as a driver for peace.

The IUPAP Executive Council

1. The link has been suppressed by Russian authorities. Please find the text on: https://www.eureporter.co/world/russia/2022/02/24/an-open-letter-from-russian-scientists-and-science-journalists-against-the-war-with-ukraine/?fbclid=IwAR1FLryMxAMAVpnwDdSp-dF3zId40xCBKOiDpI3LkyaLHD1ABG4SjmBRk_8#.YheyVwO9o4s.twitter

C11 upcoming conferences

Lepton Photon

- 2007 - Daegu
- 2009 - Hamburg
- 2011 - Mumbai
- 2013 - San Francisco
- 2015 - Ljubljana
- 2017 - Guangzhou
- 2019 - Toronto
- 2021 - Manchester
- 2023 - Melbourne

ICHEP

- 2008 - Philadelphia
- 2010 - Paris
- 2012 - Melbourne
- 2014 - Valencia
- 2016 - Chicago
- 2018 - Seoul
- 2020 - Prague (virtual)
- 2022 - Bologna
- 2024 - Prague

2022 Neutrino (Seoul), LHCP (Taipei), ICFA seminar (Berlin), Baldin (Dubna)
2023 TIPP (Cape Town), CHEP (Norfolk)

TIPP series and governance

- ✓ Established in 2009 by C11/IUPAP, originally conceived as the “Rochester conference in Instrumentation” → alternate with VIENNA, PISA conference series; same year as INSTR
- ✓ Remarkable progress achieved during the last decade, recognition of the conference is gradually approaching the level of ICHEP or Lepton-Photon in particle physics community
 - → stable attendance: Tsukuba (440), Chicago (483), Amsterdam(448), Beijing (301), TRIUMF (529)
 - → more to be addressed: how is it different from IEEE, industrial partnership, open discussion of “problem issues”, less project-oriented reports, more focus on new & emerging technologies ...
- ✓ The TIPP Steering Committee has been established in 2020 with a formal mandate from C11/IUPAP to set up a long-term leadership ensuring strategic view, continuity and tradition

TIPP SC BYLAWS:

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

Name, Objectives and Field of Interest

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, asto-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/where-we-are/external-organisations/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 Steering Committee Membership (2021 - 2023)	
Niels van Bakel	Nikhef, Amsterdam, NL
Ties Behnke	DESY Hamburg, Germany
Marcel Demarteau	ORNL, USA
Francesco Forti	INFN / University Pisa, Italy
Kazunori Hanagaki	KEK, Japan
Manfred Krammer	CERN, Switzerland
Petra Merkel	Fermilab, USA
Fabrice Retiere	TRIUMF, Canada
Yuri Tikhonov	BINP Novosibirsk, Russia
Maxim Titov (Chair, 2021-2023)	CEA Saclay, France
Yifang Wang	IHEP, Beijing, China

C11 – virtual conference summary

- All talks should be **recorded** (individually if possible) and posted online. Professional **closed-captioning** is feasible and increases accessibility. The increased participation that recording allowed has been unprecedented and should be retained.
- **Frequent breaks, a shortened daily schedule** and, if necessary, a longer length in days are needed for an online conference. Without the need for physical rooms, there can be many more sessions in parallel.
- Particle Physics held a Virtual Meeting on Virtual Meetings in May 2021. The agenda and talks are at <https://indico.cern.ch/event/1026363/> and it was summarized in an article “[Learning from the Pandemic: the Future of Meetings in HEP and Beyond](#)”, Neubauer et al, e-Print: [2106.15783](#) [physics.soc-ph].
- There are also **strong environmental reasons to consider** reducing the amount of international travel associated with conferences.
- The use of commercial conference centers should perhaps be reconsidered. One major hurdle for several conferences was substantial cancellation fees for venues. These were mitigated by agreeing to postpone rather than cancel the use of the venue. But going forward, it is likely that physical attendance at conferences will decrease while virtual attendance will continue to be a useful option. Use of smaller academic facilities, which have lower costs, large numbers of smaller rooms, and better IT infrastructure for recording and streaming video may become the norm.
- Organizers might consider **charging a nominal fee** (50 EU) **to remote speakers** to cover the costs of IT, proceedings and close captioning with no fee remote registrants without a speaking role.



ICHEP 2022
BOLOGNA

ICHEP 2022 XLI

International Conference
on High Energy Physics
Bologna (Italy)

6
13 07 2022

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Welcome message

Dear colleagues and friends, we are proud to announce that the INFN divisions of Bologna and Ferrara together with the Universities of Bologna and Ferrara will host the 41th International Conference on High Energy Physics (ICHEP 2022) in Bologna, from July 6th to the 13th, 2022.

[Read More >](#)

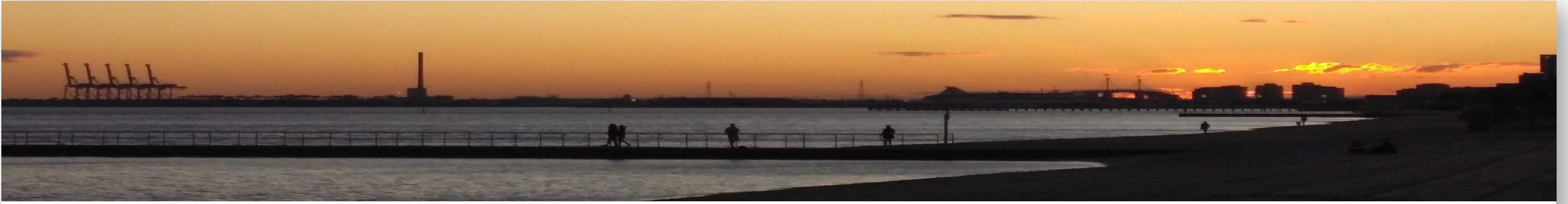
Participants 1457 [students 464 (0.32)]

in-person 1143 [students 366 (0.32)]

online [314 students 98 (0.31)]

online fraction 0.22

Talks 895



Lepton Photon 2023

Monash University will host the next symposium 17-21 July 2023

Looking forward to see many of you in Melbourne, Australia



 @lp2023monash

Solicitation for 2025 and beyond

- IUPAP C11, Particles and Fields, is soliciting applications from institutions interested in hosting the Lepton Photon Symposium in 2025 and ICHEP in 2026.
- Interested parties should contact the C11 chair –Florenca Canelli (canelli@physik.uzh.ch). Written applications will be accepted **until June 1, 2022**.
- The application should contain information about the participating institutions, the local organizing committee, likely costs and locations and alternative funding sources.
- Please see <http://iupap.org/commissions/c11-particles-and-fields/c11-conference-guidelines/> for our full conference guidelines.

Thanks to the
ICHEP hosts!

And all the excellent speakers
and poster presenters

**We hope to see you in LP 2023
in Melbourne!**

IUPAP Early Career Scientist Award 2022*

The [Commission on Particles and Fields \(C11\)](#) of IUPAP solicits nominations of outstanding young experimental or theoretical particle physicists for the two 2022 Early Career Scientist Prizes.

The prizes, each consisting of an IUPAP medal and a cash (€1000) award, will be presented at the [41th International Conference on High Energy Physics, Bologna, Italy](#) on July 6 - 13, 2022.

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

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.

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/20480>

All material should be submitted before February 1, 2022 at 12:00pm CET.

* Previously called IUPAP Young Scientist Prize

Ahmed Almhierri

"For substantial and impactful contributions to the understanding of black holes and quantum gravity, specifically related to the information paradox and its connection to quantum information theory and quantum error correction."

Ahmed Almheiri is an incoming assistant professor of physics at New York University in Abu Dhabi and an affiliate member at the Center for Cosmology and Particle Physics at New York University in New York. His research is on the interface of quantum information and quantum gravity. He had a leading role in revealing this connection by demonstrating that gravity implements a quantum error correcting code, and by addressing the information paradox through calculating the information content of the Hawking radiation emitted by black holes. Ahmed was awarded the 2021 New Horizons in Physics Prize and is the recipient of the Pride of the Emirates medal. He has a B.Sc. from the University of Toronto and a M.Sc. and Ph.D. from the University of California at Santa Barbara, and completed a postdoc at the Stanford Institute for Theoretical Physics at Stanford University, and recently finished a long term membership at the Institute for Advanced Study in Princeton, NJ.



Adi Ashkenazi

“For conducting and leading new experiments to study nuclear-physics effects that take place in neutrino interactions and implements them in simulation. These efforts are crucial for fully utilizing the potential of current and future high-statistics neutrino experiments around the world.”

Dr. Adi Ashkenazi is a senior lecture in the high energy physics department at the Tel Aviv University. Ashkenazi's research plan is focused on estimating the impact of nuclear effects in neutrino experiments, coordinating an effort to leverage electron scattering data to benchmark models and improve neutrino event generators. Ashkenazi is an active member of MicroBooNE and DUNE, a spokesperson of a dedicated electron scattering experiment at JLAB, and a Monte Carlo developer. Her lab plans to produce a series of novel measurements that will improve current models used for neutrino interaction simulations to support the needs of the future DUNE experiment for oscillation precision measurements and New Physics searches. Before arriving at her current position, Dr. Ashkenazi was a postdoctoral researcher in Physics at the Massachusetts Institute of Technology and was based at Fermilab. She received her undergraduate degree from the Hebrew University of Jerusalem, a Master and a PhD from Tel Aviv University.

