



# Plans on IUPAP Centenary

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C&CC, Trieste, October 2021

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# Recap of ideas

- Split the work around the following initiatives:
  - The Centenary Symposium
  - History of IUPAP
  - Satellite events elsewhere in the world
  - Photo contest

# The Centenary Symposium

- Fix the dates! : Mond. to Wed. **11,12, 13 July 2022**
  - At ICTP, in Trieste, with online participation
  - Room available for up to 270 people (500 in SISSA)
- IUPAP C&CC: Friday/Sat. 8-9 July (in person?)
- IUPAP GA : Th. 14 July (in person or remotely)

# We sketched a program based on the following :

- Three segments on the IUPAP history, one per day
- A virtual connection to a very large (ICHEP 2022, in Bologna, ~1000 people) C11 IUPAP type A conference on day one
- Five panels on IUPAP mission statements
  1. **Women and underrepresented groups**
  2. **Science advising policy**
  3. **Early career**
  4. **Physics for development**
  5. **Education**
- Three regional panels addressing achievements in the region and expectations from IUPAP (What can IUPAP do for the region?)
  1. **Latin America**
  2. **Asia & Pacific**
  3. **Africa & Middle East**
- Four prestigious keynote speakers (from the list provided by the commissions)
- Three brief keynote speakers (early career, from the list provided by the commissions)
- Two thematic presentations (mini panels):
  1. **Why it is important to be a member**
  2. **Focus on life outside of academia**

# Day one (11 July, UCT+2)

- 9:00-9:30 Welcome (Directors of ICTP, SISSA, FIT) and Opening (Michel, Silvina, Bruce) – presentation of IUPAP, its activities and mission statement & IYBSSD)
- 9:30-10:00 IUPAP History (Roberto Lalli)
- 10:00-10:30 Testimonials from the past (Cecilia Jarlskog, Judy Frantz,...)
- 10:30-11:00 Break
- 11:00-11:15 Connection with ICHEP (C11 type A conference)
- 11:15-12:00 Keynote(1)
  
- 14:00-15:00 Panel on mission statement (1): “Women and underrepresented groups”: convener Gillian Butcher (→discussion to be continued in breakout room)
- 15:00-16:00 Regional session (1): achievements in the region and expectations from IUPAP- Latin America – Silvina convener (→breakout room)
- 16:00-16:30 Break
- 16:30-17:15 Keynote(2) - William Phillips (C1)

Names are tentative initial suggestions

# Day two (12 July, UCT+2)

- **9:00-9:30 Regional session (2): achievements in the region and expectations from IUPAP- Asia & Pacific - conveners Kuijuan Jin / Mihoko Nojiri / Sunil Gupta (→breakout room)**
- **10:00-10:30 Why it is important to be a member - convener Nithaya Chetty (→breakout room)**
- **10:30-10:50 break**
- **10:50-11:15 IUPAP History(2)**
- **11:15-12:00 Keynote(3)**
  
- **14:00-15:00 Regional session (3): achievements and expectations from IUPAP- Africa & Middle East - conveners Igle Gledhill/Rudzani Nemutudi/LAAAMP( Marielle Agbahoungbata) (→breakout room)**
- **15:00-16:00 Panel on mission statement (2): science advising policy (Conveners Laura Greene/Cathy Foley/G.Parisi/F.Gianotti) (→breakout room)**
- **16:00-16:30 Break**
- **16:30-17:15 Keynote(4)**

Names are tentative initial suggestions

# Day three (13 July, UCT+2)

- 9:00-9:30 9:00-10:00 Panel on mission statement (3): early career (winners, IAPS, etc) (→breakout room)
- 10:00-10:30 Focus on life outside of academia (convener Christoph Rossel, WG16) (→breakout room)
- 10:30-10:50 break
- 10:50-11:15 History(3)
- 11:15-12:15 Keynotes(5+6+7) Early career scientific talks (Pablo Jarillo-Herrero or Yuanbo Zhang? (C8), Pratika Dayal (C19), Jeremie Voix(AC3), 20' each)
  
- 14:00-15:00 Panel on mission statement (4): “Physics for development”: convener Sekazi K. Mtingwa (C13) (→breakout room)
- 15:00-16:00 Panel on mission statement (5): “Education” (convener Tetyana Antimirova, C14) Lindstrom, Singh (speakers suggested by C14), etc (→breakout room)
- 16:00-16:30 Break
- 16:30-16:40 Photo contest awards
- 16:40-17:00 Closing and future (including launch of IUPAP lectures)

Names are tentative initial suggestions

# Keynote speakers

- **William Phillips** (USA) C2 or Donna Strickland (Can) C15-C17 or Serge Haroche (C15)– *Atomic and optical physics*
- **Gabriela Gonzalez** (Arg) AC2 or Barry Barish (USA) or Kip Thorne (USA) AC2, or Jocelyn Bell-Burnell (UK) WG5 or Jim Peebles – *Physics of the Universe*
- **Takaaki Kajita** (Jap, Neutrinos, C4) or Hitoshi Murayama (Theory, C11) – *Fundamental physics* (available to come)
- **Tim Palmer** (Oxford) or Carolina Vera (Arg) -- *Climate change* (TP suggested by G.Parisi)
- All names, except the last one, suggested by the commissions & WGs
- I launched a call to the commissions to collect names of potential speakers Scientific excellence but also ability to engage a multidisciplinary audience
- ~40 nominees from commissions, affiliated comm. & WGs, see :  
<https://docs.google.com/spreadsheets/d/14GmGya0OiXUrdzdJm5hC8avIMyJqjstlY2WZe5xRMWI/edit#gid=0>



# Some comments

- Preference for keynote speakers being present in Trieste (this would also facilitate local sponsoring because we could profit from their presence to organise public outreach events in Trieste in parallel)
- Regional panels could take place in the regions and connect remotely
  - Satellite events could be organised in parallel
- Event recorded and possibly broadcasted to youtube

# One Hundred Years of IUPAP: A History

Topics will include:

- the role of IUPAP in the development of physics
- the connections between science and diplomacy in the work of IUPAP
- the internationalisation of physics through the 20th century
- the relationship between basic and applied physics
- the birth and development of scientific international organisations

Coordination: **Roberto LALLI** (Max Planck institute for the History of Science, Berlin, Germany) & **Jaume NAVARRO** (Universidad Pais Vasco, San Sebastian/Donostia, Spain) President of the Inter-Union Commission on the History and Philosophy of Physics

# Many researchers involved in the project

- Matthew Adamson, *McDaniel College Budapest*
- Nobumichi Ariga, *National Museum of Nature and Science, Tokyo*
- Luisa Bonolis, *Max Planck institute for the History of Science, Berlin, Germany*
- Daniele Cozzoli, *Pompeu Fabra University, Barcelona*
- Danielle Fauque, *Paris-Saclay University, Paris*
- Robert Fox, *Oxford University*
- Barbara Hof, *University of Zurich*
- Dieter Hoffman, *Max Planck Institute for the History of Science, Berlin*
- Danian Hu, *City College, New York*
- Christian Joas, *Niels Bohr Archive, Copenhagen*
- Shaul Katzir, *Tel Aviv University*
- Kenji Ito, *Graduate university for Advanced Studies, Hayama, Japan*
- Roberto Lalli, *Max Planck Institute for the History of Science, Berlin*
- Adele La Rana, *Verona University*
- Jinyan Liu, *Institute for the History of Natural Sciences, Chinese Academy of Sciences*
- Gisela Mateos, *Universidad Nacional Autónoma de México, Mexico City*
- Jaume Navarro, *University of the Basque Country, San Sebastian, Spain*
- Doubravka Olšáková, *Academy of Sciences of the Czech Republic, Praha, Czech Republic*
- Jahnvi Phalkey, *Science Gallery Bengaluru, India*
- Javier Ramiro Poveda Figueroa, *PhD student, Universitat Autònoma de Barcelona*
- Simone Turchetti, *University of Manchester*
- Brigitte van Tiggelen, *Science History Institute, Paris*
- Luciana Vieira Souza da Silva, *University of São Paulo, Brazil*
- Xiaodong Yin, *Capital Normal University, Beijing, China*
- Zuoyue Wang, *California State Polytechnic University, Pomona*

# Project schedule & Objectives

- Digitization of IUPAP archives: January-December 2021
- Deadline for abstracts: November 2021
- Pre-circulation of draft manuscripts: end June 2022
- Workshop in San Sebastian/Donostia, Spain: Oct. 2022
- Research compiled in a book to be published in 2023  
(primary target: Oxford University Press)

# Digitization of IUPAP archives

- 69 volumes at IUPAP Gothenburg Secretariat, Royal Swedish Academy of Sciences, Stockholm
- 74 folders at IUPAP sub-series of the Larkin Kerwin Fonds at the University of Laval
- 6 volumes at IUPAP Quebec Secretariat, Center for the History of Science, Royal Swedish Academy of Sciences, Stockholm
- 3 volumes at IUPAP, Transfermium, Center for the History of Science, Royal Swedish Academy of Sciences, Stockholm
- Numerous boxes of the Amaldi, Persico, Salvini and Cabibbo Collections, Archives of physics department, University Sapienza, Rome
- Various folders of Weisskopf Collection, MIT Archives
- Various boxes of Millikan Collection, Caltech Archives

# Satellite events elsewhere in the world

- Letter sent to all liaisons and physical societies (in collaboration with Nithaya Chetty) inviting them to organise such events
- Ideas for such events available on IUPAP web site, at <https://iupap.org/centennial/satellite-events/>
- Publicity material also made available, see <https://iupap.org/centennial/promotional-material-souvenirs/>
- Principles for celebrations of the IUPAP Centenary written down (Igle Gledhill, Nithaya Chetty) to enhance inclusivity and diversity in all its many facets in our celebrations
- Some special financial assistance possible for Africa, Latin America and lower income regions of Asia needing assistance

# Satellite events elsewhere in the world

- So far positive responses from :
  - Chinese Physical Society (in Fall 2022, 90 years of CPS and IUPAP100)
  - Korean Physical Society (70 year of KPS and IUPAP100). Also APAC (Asia-Pacific Physics Conference) next year in Korea
  - Japan (Mihoko Nojiri)
  - Pakistan Physical Society
- IUPAP encourages these various events and will act as an 'umbrella', however, **things will not happen unless YOU promote them!**

# IUPAP 100 Photo Contest

(Silvina & Igle)

- International photo contest to portray the beauty of physical processes, the impact of physics on our everyday lives and the ways in which physics research and education is carried out all over the world
- Submissions will be open in two categories:
  - “Beyond our eyes” (images obtained through scientific equipment or produced via numerical simulations)
  - “At a glance” for all other photos
- Idea is to “pre-filter” the photos by commission
- A jury (including artists and physicists with an interest in photography) will choose 12 photos and the winners
- Contest rules being finalised
- Evaluating the possibility of organising an exhibition in Trieste during Symposium



# Other events & ideas

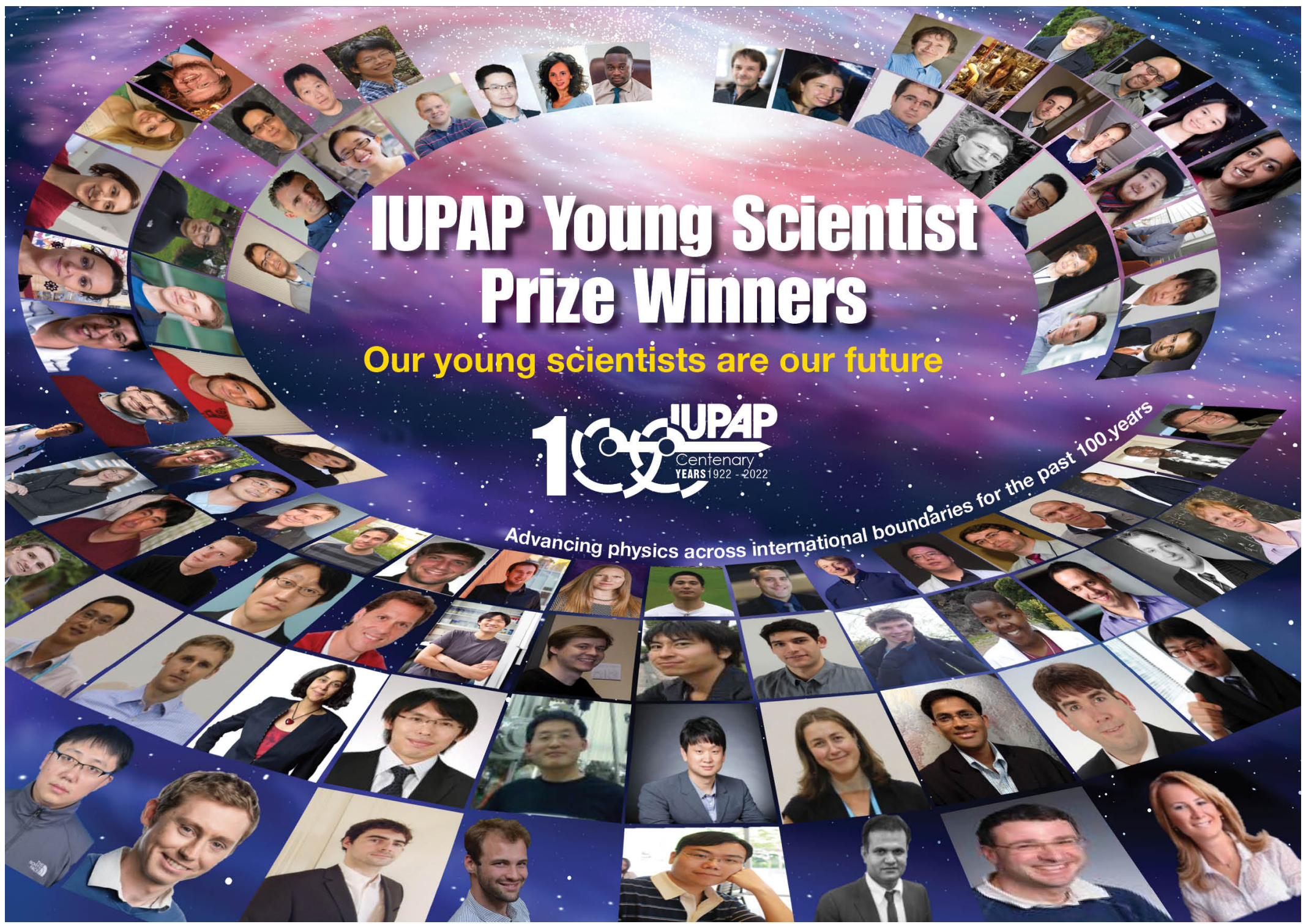
- Liaising with IAPS for the organization of PLANCKS 2022 in Munich (Physics League Across Numerous Countries for Kick-ass Students)
- At Symposium, launch IUPAP lectures: monthly? “Meet the scientist”, format putting emphasis on interactions with speaker
- Preparation of a short (<5min) video about IUPAP, with help of CERN Audiovisual Production Service that we can share on the web, etc
- 2023 Special General Assembly, in Geneva at the new Science Gateway building, 100 year after the first General Assembly (1923 – Paris)

# IUPAP Young Scientist Prize Winners

Our young scientists are our future



Advancing physics across international boundaries for the past 100 years






**IUPAP Young Scientist Prize Winners** Our young scientists are our future  
Advancing physics across international boundaries for the past 100 years

2022 – IUPAP Celebrates 100 years!



# Leaflets



## Your Commission

To be filled by you with mission statement and facts&figures from your commission and WGs



## INTERNATIONAL UNION OF PURE AND APPLIED PHYSICS

“Advancing Physics across International boundaries for the past 100 years”

### INTERNATIONAL COMMISSIONS

- C1: Commission on Policy and Finance
- C2: Commission on Symbols, Units, Nomenclature, Atomic Masses and Fundamental Constants
- C3: Statistical Physics
- C4: Astroparticle Physics
- C5: Low Temperature Physics
- C6: Biological Physics
- C8: Semiconductors
- C9: Magnetism
- C10: Structure and Dynamics of Condensed Matter
- C11: Particles and Fields
- C12: Nuclear Physics
- C13: Physics for Development
- C14: Physics Education
- C15: Atomic, Molecular, and Optical Physics
- C16: Plasma Physics
- C17: Laser Physics and Photonics
- C18: Mathematical Physics
- C19: Astrophysics
- C20: Computational Physics

### AFFILIATED COMMISSIONS

- AC1: International Commission for Optics
- AC2: International Commission on General Relativity and Gravitation
- AC3: International Commission for Acoustics
- AC4: International Commission on Medical Physics

### WORKING GROUPS

- WG1: International Committee for Future Accelerators (ICFA)
- WG2: Communication in Physics
- WG5: Women in Physics
- WG7: International Committee on Ultrahigh Intensity Lasers (ICUIL)
- WG9: International Cooperation in Nuclear Physics (ICNP)
- WG10: Astroparticle Physics International Committee (ApPIC)
- WG11: Gravitational Wave International Committee (GWIC)
- WG12: Energy
- WG13: Newtonian Constant of Gravitation
- WG14: Accelerator Science
- WG15: Soft Matter
- WG16: Industry
- WG17: Centenary



57 Member Countries

### Inter Union Relations

### Aims:

- to stimulate and promote international cooperation, communication, research and education in physics;
- To foster inclusiveness and diversity in physics;
- To uphold openness, honesty and integrity in the practice, application and promotion of physics;
- To support the free circulation of scientists;
- To promote international agreements on symbols, units and nomenclature; and cooperating with other organizations on disciplinary and interdisciplinary problems.
- To help in the application of physics toward solving problems of concern to humanity.
- to sponsor suitable international meetings and to assist organizing committees

### Conference Sponsorship

Each year, IUPAP sponsors and endorses ~ 50 conferences annually with special attention given to those held in developing countries.





## 2022 Centenary Celebrations

The year-long CENTENARY celebrations will:

- Increase **awareness** of physics discoveries and the close ties among physicists at research centres globally.
- Stimulate worldwide interest in physics and science, as a tool for education and a motor of innovation, technology & economic development.
- Reach out to the global physics community, national science organisations, policy-makers, societies, students, families and the general public.

### Young Scientist Awards Commission Awards

~200 prizes have been awarded in the last 10 years



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