



# Plans on IUPAP Centenary

Monica Pepe Altarelli  
C&CC, January 2022

[iupap100@iupap.org](mailto:iupap100@iupap.org)

# Recap of ideas

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

# The Centenary Symposium

- Mond. to Wed. **11,12, 13 July 2022**
  - At ICTP, in Trieste, hopefully in person but with online participation
  - Room available for up to 270 people (500 in SISSA)
- IUPAP C&CC: Wed to Friday 6-8 July (hopefully in person)
- IUPAP GA : Th. 14 July (in person or remotely)



# Program based on the following ideas:

- Three 30' segments (maybe four) on the IUPAP history
- Two testimonials from the past
- A virtual connection to a very large (ICHEP 2022, in Bologna, ~1000 people) C11 IUPAP type A conference on day one
- Five 1h panels on IUPAP mission statements
  1. **Women and underrepresented groups**
  2. **Science advising policy**
  3. **Early career**
  4. **Physics for development**
  5. **Education**
- Three 1h 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
- Three brief (20') early-career keynote speakers (award winners)
- Two thematic presentations (mini 30' panels):
  1. **Why it is important to be a member**
  2. **Focus on physicists working in industry**



# Keynote speakers

- **William Phillips** (USA) C2 – *Atomic and optical physics*
- **Jocelyn Bell-Burnell** (UK) WG5 – *Physics of the Universe*
- **Takaaki Kajita** (Jap, *Astroparticle*, C4) → accepted
- **Tim Palmer** (Oxford) *Climate change* (suggested by G.Parisi) → accepted
- All names, except the last one, suggested by the commissions & WGs

# 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<sup>1</sup> - **Roberto Lalli\***(AC6)
- 10:00-10:40 Testimonials from the past (Cecilia Jarlskog, Judy Frantz)
- 10:40-11:15 Break
- 11:15 -11:30 Connection with ICHEP (C11 type A conference)
- 11:30-12:30 Keynote(1) - **Takaaki Kajita** (C4)
- 14:00-15:00 Panel on mission statement (1): “Women and underrepresented groups”: convener **Gillian Butcher** (WG5)  
(→discussion to be continued in breakout room)
- 15:00-16:00 Regional session (1): achievements in the region and expectations from IUPAP- Latin America – convener **Silvina P.D.**  
(→breakout room)
- 16:00-16:30 Break
- 16:30-17:30 Keynote(2) - William Phillips (C2)

\* **confirmed speakers**



# Day two (12 July, UCT+2)

- 9:00-10:00 Regional session (2): achievements in the region and expectations from IUPAP- Asia & Pacific - conveners **Kuijuan Jin (C13)** / **Mihoko Nojiri (C11)** / **Sunil Gupta (C4)** (→breakout room)
- 10:00-10:30 Why it is important to be a member - convener **Nithaya Chetty** (→breakout room)
- 10:30-10:50 break
- 10:50-11:20 IUPAP History2 - **Jaume Navarro (AC6)**
- 11:20-12:20 Keynote(3) - **Tim Palmer**
  
- 14:00-15:00 Regional session (3): achievements and expectations from IUPAP- Africa & Middle East - conveners **Igle Gledhill/Rudzani Nemutudi**/suggested participant LAAAMP( Marielle Agbahoungbata) (→breakout room)
- 15:00-16:00 Panel on mission statement (2): science advising policy (Convener **Laura Greene (C1,C10)**/ suggested participants Cathy Foley/**G.Parisi**/F.Gianotti) (→breakout room)
- 16:00-16:30 Break
- 16:30-17:30 Keynote(4) - **Jocelyn Bell-Burnell (?)**



# Day three (13 July, UCT+2)

- 9:00-10:00 Panel on mission statement (3): early career - Convener/moderator **Angela Bracco**, president of Italian Physical Society (IAPS, EPS Young minds, Oreal prize 2020...) (→breakout room)
- 10:00-10:30 Focus on physicists working in industry (convener Christoph Rossel, WG16) (→breakout room)
- 10:30-10:50 break
- 10:50-11:20 IUPAP History3 - **Jahnvi Phalkey**
- 11:20-12:20 Keynotes(5+6+7) Scientific talks from recent Early career winners (Yeejun Yang (C8), Pratika Dayal (C19), Anne-Florence Bitbol (C6), 20' each) - do you know these winners ? Can you encourage their participation explaining the context to them?
  
- 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 (**Silvina**)



# 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

**Symposium speakers:** **Lalli** - will cover developments after world war 2; **Navarro** - interwar period; **Phalkey**, film maker and historian of science&technology from Science Gallery Bengaluru - international aspects of IUPAP's work in the developing world; if he is available and time allows, **Robert Fox**, leading British authority on the history of science - could cover international scientific cooperation and its transformation in time



# Project schedule & Objectives

- Digitization of IUPAP archives: January-December 2021 ✓
  - Gothenburg Secretariat : <https://wg-cloud.gnz.mpg.de/s/Aja5zNpWXs8bFqN>
  - Quebec Secretariat: <https://wg-cloud.gnz.mpg.de/s/ZzBZDF4mADDtRbR>
  - Transfermium group: <https://wg-cloud.gnz.mpg.de/s/83mx2F7PcKW4iH5>
  - Larkin Kerwin Fonds at the University of Laval: <https://wg-cloud.gnz.mpg.de/s/xo79SNPAMcdqSZD>
  - Other sources: <https://wg-cloud.gnz.mpg.de/s/W5YpRjFZE4HEPAC>
- [Documents stored on Next Cloud and on a couple of computers plus drive belonging to Roberto Lalli. IUPAP should also have a copy of these documents.]
- 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 (possible target: Oxford University Press, open access)

# 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



# 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 APPC15 (Asia-Pacific Physics Conference) in August in Korea
    - To share and discuss visions and prospects for global and regional collaborations in promoting physics research and education;
  - Women in Physics in Taipei in October
  - "Life and Physics" (in which Asia-Pacific physicists discuss how physics research has changed their lives, November or after, location to be decided)
  - Regional E-conference from Pakistan Physical Society (18-21 January, very successful event!) : [https://www.pps-pak.org/wp-content/uploads/2021/11/20210919-Brochure\\_FINAL-Revised.pdf](https://www.pps-pak.org/wp-content/uploads/2021/11/20210919-Brochure_FINAL-Revised.pdf)
  - 100 years of Physics in Africa (will be supported financially) - share stories that celebrate and communicate the immense contributions that physics education and research have made to Africa's development : <http://www.saip.org.za/100YearsOfPhysics/>
- IUPAP encourages these various events and will act as an 'umbrella', however, **things will not happen unless YOU promote them! So, support these activities and get involved!**

Asia-Pacific chairs have  
already met twice

# Budget

- Travel&accomodation for 40 speakers, plus a couple of journalists
- Coffee breaks 200 attendees
- Dinner
- Conference bag or gadget
- Photo exhibit in Trieste
- Photo contest awards
- Secretariat assistance
- Communication/outreach assistance (SISSA Medialab)
- Satellite events (will sponsor one event in Africa and two more in other lower-income regions)
- Printing costs 100 years of IUPAP

**Estimated ~230 kEuros**



# Urgent actions

- Finalise invitations
- Announce dates “urbi et orbi” - please help
- Press release?
- Add more information to the webpage and prepare a detailed Symposium program on Indico
- Panel chairs should start preparing their panels, reflect on focus and key messages, send their invitations accordingly etc
- Launch the photo contest (see next presentation)

# Other events & ideas

- Liaising with IAPS for the organization of PLANCKS 2022 in Munich (Physics League Across Numerous Countries for Kick-ass Students)
- 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)
- At Symposium, launch IUPAP lectures? “Meet the scientist”, format putting emphasis on interactions with speaker

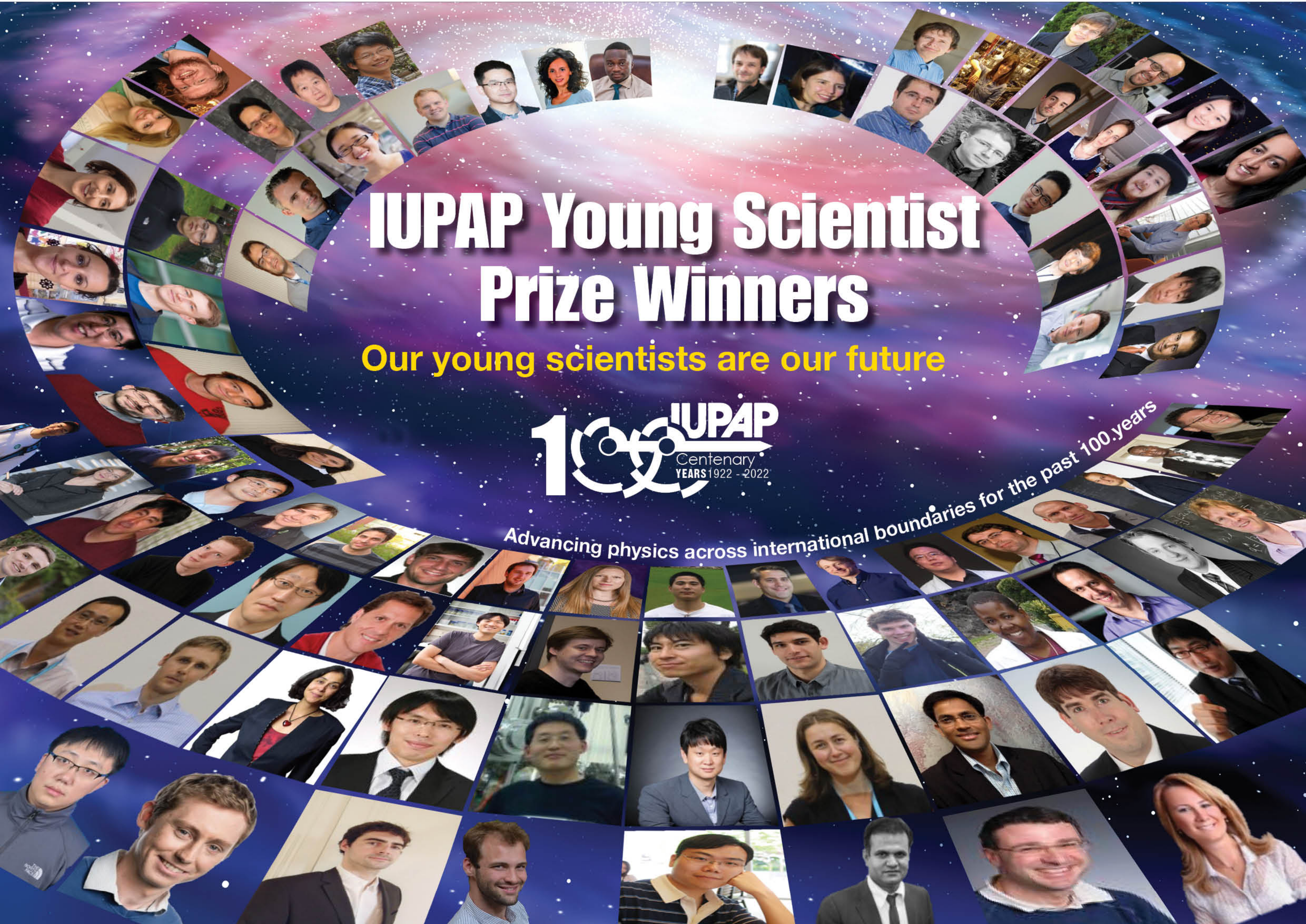


# IUPAP Young Scientist Prize Winners

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.



**100 IUPAP Centenary Celebrations 2022**

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



IUPAP Singapore, Nanyang Technological University, Nanyang Executive Centre #04-09, 60 Nanyang View, Singapore 639673  
 Tel: +65 6592 7784; Email: [IUPAP.Admin@ntu.edu.sg](mailto:IUPAP.Admin@ntu.edu.sg); Website: [www.iupap.org](http://www.iupap.org)