



Membership matters (20min)

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With Support from Jens Vigen and Igle Gledhill

Report to the IUPAP GA Oct 2023

Update on territorial members

- About 65 members (195 countries, i.e., 1/3 global membership)
- Cannot afford loss in membership
 - For the time leading to the Centenary Celebration, it was felt that IUPAP should be lenient in dealing with defaulting members
 - However, perennially defaulting members are hereby 'given notice' to make arrangements to meet their obligations or else they will be formally excluded at the 2024 GA in Beijing Action item

Update on territorial members

- Cannot afford to neglect interests of our paying members
 - Must continue with one-on-one engagements on 3-year cycle **Action item**
 - Members must readily see direct benefits
 - The work of IUPAP must be communicated to membership and beyond
- On-going conversations with many different countries, both old and new
- Need to set up a Membership Committee **Action item**



Pacific Island nations

- Will be disproportionately affected by global problems
 - Climate, energy, food security
 - Need a stronger basis for scientific development
 - Physics is a lead discipline
 - When physics is strong, science is strong
- Thanks to
 - New Zealand Institute of Physics: David Hutchinson (C13), Gabriel Bioletti (NUS)
 - Australian Academy of Science: Halina Rubinsztein-Dunlop; Rosanna Shamshudin, Swastika Devi, Nancy Pritchard, Meaghan Dzundza
 - APS: Amy Flatten
 - Surya Raghu (UNESCO), Richard Martin (ASESMA)
 - IUPAP: Michel Spiro, Jens Vigen, Igle Gledhill, Kwek Leong Chuan

Pacific Island nations

- National University of Samoa (NUS) as a regional coordinating institution
 - Connecting with Fiji, Tonga and other island nations
- Major online meeting Feb 2023, involve all stakeholders
 - Island physicists, senior university administrators, government
 - Coalition of international partners, invitation for other organisations to join
- Follow up with an in-person planning workshop and a scientific meeting (school, workshop, conference, etc.) at NUS Action item
 - Exact format of which is yet to be determined
 - Offer various options to the Island physicists and their institutions

Pacific Island nations

- Intention is to secure a single unit (share) for the Pacific Island Nations, i.e. full membership of the IUPAP
- Early indications are that one of the international partners is able and willing to pick up this cost
 - Investment, actually!

Approval of Corporate Associate Members (CAM)

- Jens Vigen to report
- CAM's
 - Advanced Laser Light Source (ALLS) — 2022
 - European Organization for Nuclear Research (CERN) — 2022
 - Joint Institute for Nuclear Research (JINR) — 2023
 - Park Systems — 2023
 - Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME) — 2022

Associate Territorial Membership (ATM)

- Changes to Articles to accommodate ATM's have been APPROVED earlier
- 10% cost of one share, benefits are limited, spelt out in MoU
- Not more than 10% of members should be ATM's
- Member country must commit to programme of physics development (*quid pro quo*), of mutual benefit
 - Not simply a discounted levy
- In principle, an open call for applications on website Action item
- Nepal is an important test case
- Renewal on 3-year cycle, following submission of a report
 - Can morph into full membership



**Associate Territorial Member Adhering
Body Logo**

**Associate Territorial Member
Memorandum of Understanding**

between

The International Union of Pure and Applied Physics (IUPAP)

and

the **[Associate Territorial Member Adhering Body]**

This Memorandum of Understanding (MOU) sets forth the terms and understanding between the International Union of Pure and Applied Physics (IUPAP) and the **[Associate Territorial Member Adhering Body]** (referred to here as the Adhering Body) becoming an Associate Territorial Member of IUPAP (see the Articles and Internal Regulations of IUPAP at <https://iupap.org/documents/statutes-bylaws/>).

1. Background

This partnership is of profound importance since IUPAP aspires to be as inclusive as possible on a global scale, having many members who contribute to physics, and the **[Associate Territorial Member Adhering Body]** wishes to be well connected to the international physics community by becoming an **Associate Territorial** Member of IUPAP.

2. Purpose

This signed MOU establishes the formal relationship between IUPAP and the **[Associate Territorial Member Adhering Body]** by which **[Name of the Territory]** becomes an **Associate Territorial** member of IUPAP.

Proposal for first Associate Territorial Member (ATM): Nepal

- Herculean effort by Nilam Shrestha (President of Nepalese Physical Society)
- Led by Igle Gledhill, Jens Vigen, Michel Spiro, NC
- International Conference on Physics for Sustainable Energy (ICPSE-2023)
 - 22, 23 Sept 2023
 - Under auspices of WG21 (Physics and the Green Economy → **Physics for Climate Action and Sustainable Development**)

About 90 participants,
20% Women!



Proposal: Nepal admitted as the first ATM Action item



- National Advisory Committee**
- Prof. Dr. Dillip Subba
 - Prof. Dr. Binil Aryal
 - Er. Kul Man Ghising, Electricity Authority
 - Prof. Dr. Devendra Rana
 - Prof. Dr. Lok Narayan
 - Prof. Dr. Shekhar Gurung
 - Prof. Dr. Sitarani Bysani
 - Prof. Dr. Jeevan Jyoti
 - Prof. Dr. Leela Pradhan
 - Prof. Dr. Bhatwami Das
 - Prof. Dr. Sunil Adhikary, Campus chief, TC_TU

Conference Chair:
 Prof. Dr. Nilam Shrestha Pradhan,
 Department of Physics, Tri-Chandra Multiple Campus,
 Tribhuvan University, Kathmandu

Conference Coordinators:
 Prof. Dr. Narayan Chapagain, ASCOL
 Dr. Lekha Nath Mishra, Patan Campus
 Call: 9841306120
 Email: imisira@gmail.com

Local Organizing Committee (LOC):
 Dr. Hari Krishana Neupane (LOC-Chair) Call:9841760162
 Dr. Sanju Shrestha/Ms. Khem Kumari Lamichhane
 Dr. Niraj Dhital/ Dr. Dinesh Acharya
 Mr. Madhu Sudan Paudel/ Mr. Ram Sharan Karki
 Mr. Mukunda K.C./Mr. Rajesh Shrestha
 Ms. Rachhana Ghimire/ Ms. Manisha Dwa

Conference Secretariat:
 Dr. Hari Shankar Mallik,
 Centre Department of Physics, Tribhuvan University,
 Kirtipur, Call: 9841505294
 Email: hsmallik.cdp@gmail.com



Benefits to Nepal:

The proposed gathering of research-active scientists from diverse backgrounds can bring significant benefits to Nepal. The interactions and collaborations among these physicists can lead to the development of new technologies, innovative solutions, and scientific advancements that can address crucial issues related to sustainable energy through physics.

These benefits extend beyond energy and encompass areas such as agriculture, healthcare, and environmental sustainability. By fostering such collaborations, the quality of life for Nepalese citizens can be improved, and the country's economic growth can be boosted. Moreover, this gathering presents opportunities for Nepalese physicists to network and collaborate with Nepal Government and international researchers, facilitating knowledge sharing and capacity building within the country's research community. Ultimately, the conference's outcomes will contribute to the formulation of policies and strategies for sustainable energy development in Nepal.



Organized by:
Nepal Physical Society (NPS) and International Union of Pure and Applied Physics (IUPAP)
 in association with
Tribhuvan University
 Department of Physics
 Tri-Chandra Multiple Campus,
 Kathmandu, Nepal



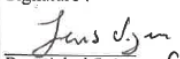

8. Duration

This MoU is intended to reflect a long-term commitment between the two parties. The Nepal Physical Society, as the Adhering Body, may resign and the effect will formally take place at the following GA.

ATM status is renewable on a 3-year basis in terms of the Articles and Internal Regulations and based on the 3-year report approved by the GA.

This MOU is at-will and may be modified by mutual consent of authorized officials from IUPAP and the Nepal Physical Society.

This MOU shall become effective upon signature by the authorized officials from IUPAP and from the Nepal Physical Society subject to the ratification of the IUPAP Articles and Regulations concerning the establishment of Associate Territorial Members, and will remain in effect until modified or terminated by any one of the partners by mutual consent.

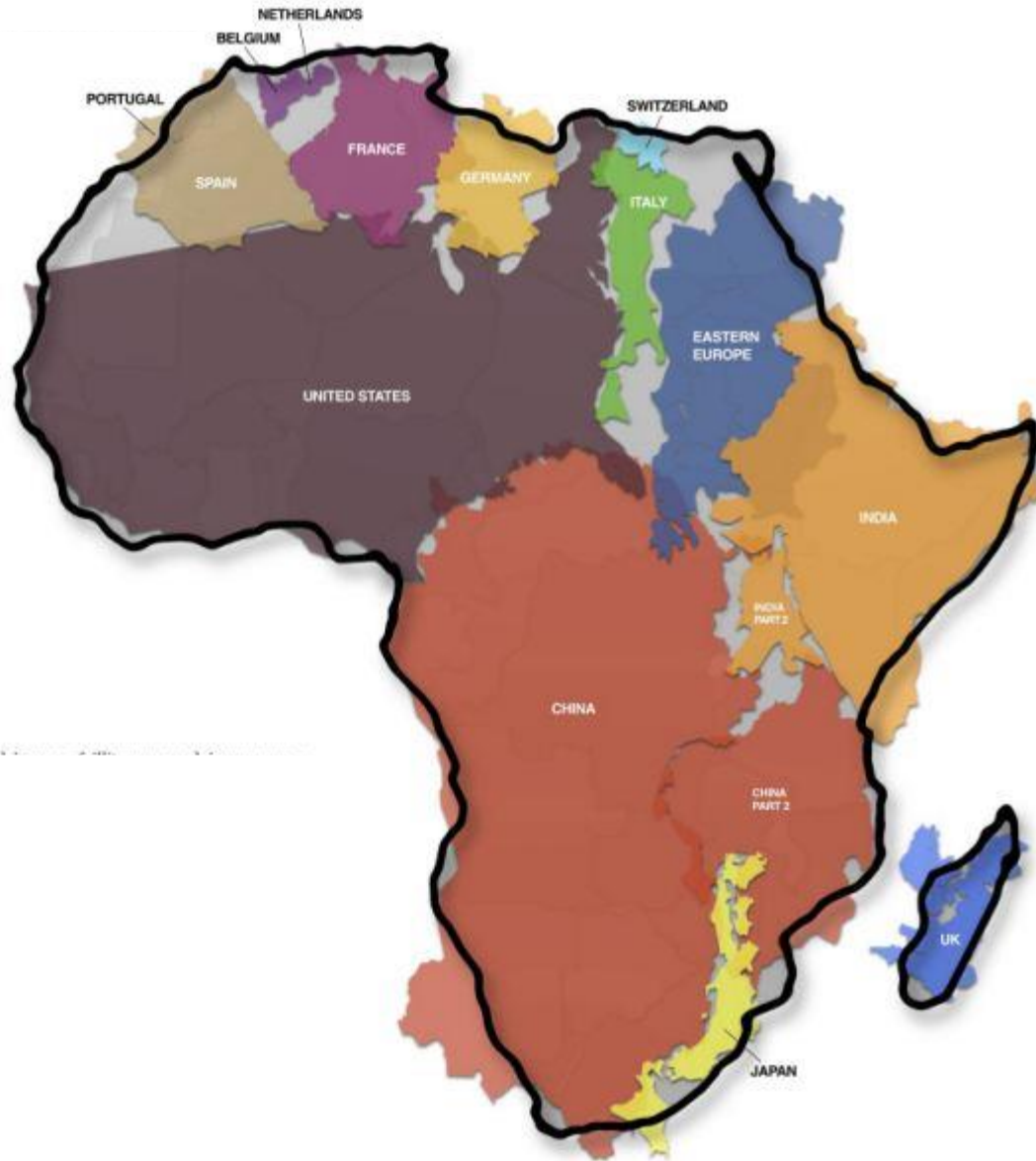
<p>Contact Information IUPAP Dr. Michel Spiro President of the International Union of Pure and Applied Physics (IUPAP)</p> <p>Fondazione Internazionale Trieste per il Progresso e la Libertà delle Scienze c/o ICTP Strada Costiera 11 34151 Trieste</p> <p>Email: mspiro@admin.in2p3.fr Web: https://iupap.org/</p>	<p>Contact Information Nepal Physical Society Prof. Nilam Shrestha President of the Nepal Physical Society</p> <p>Tri-chandra Multiple Campus Ghantaghar, Kathmandu Nepal</p> <p>Email: nilamspradhan@gmail.com Web: https://nps.org.np/</p>
<p>Signature:  Dr. Michel Spiro for M. Spiro</p> <p>Date: 22/9 - 2023</p>	<p>Signature:  Prof. Nilam Shrestha</p> <p>Date: Sept 22, 2023</p>

Other potential Associate Territorial Members

- Max about 6 (10% of full membership)
- Need to approach this with care and circumspection
- Huge effort required on part of ATM and IUPAP
 - Commit to nurture and grow physics in the territory for mutual benefit
 - Membership Committee is essential
- Better to have a few success stories than many mediocre ATM's
 - Serves as a shining light for other territories in the region

The True Size of Africa

COUNTRY	AREA x 1000 km ²
China	9.597
USA	9.629
India	3.287
Mexico	1.964
Peru	1.285
France	633
Spain	506
Papua New Guinea	462
Sweden	441
Japan	378
Germany	357
Norway	324
Italy	301
New Zealand	270
United Kingdom	243
Nepal	147
Bangladesh	144
Greece	132
TOTAL	30.102
AFRICA	30.221



- A vast and inhomogeneous continent with much diversity
- Anglophone, Francophone, Lusophone
- Different cultures, different indigenous languages, different histories, different geographies, different economies, different politics
- Not a one-size-fits-all

Proposed regional physical societies in Africa

- Jim Gubernatis, Igle Gledhill, NC
- Follows on Physics in Africa Project 2016
 - APS, IoP, EPS, ICTP, and SAIP
 - APN one of the outcomes
- Most countries do not have a physical society
- We propose working through the heads of physics departments in the region
 - Form regional physics co-operative
 - A forum and central point of communication and organization
 - Pilot programs with Southern Africa led by the SAIP and Eastern Africa led by ICTP/EAI FR
 - Secure support from IUPAP, APS, IoP, EPS, etc.



Regional Physics Cooperative
of Heads of Physics
Departments



Long term Goal: Regional
Physical Society

IUPAP ATM

IUPAP Full membership



Action item:

Budget for 2 regional meetings of
heads of physics departments



Development of Physics and Physics for Development