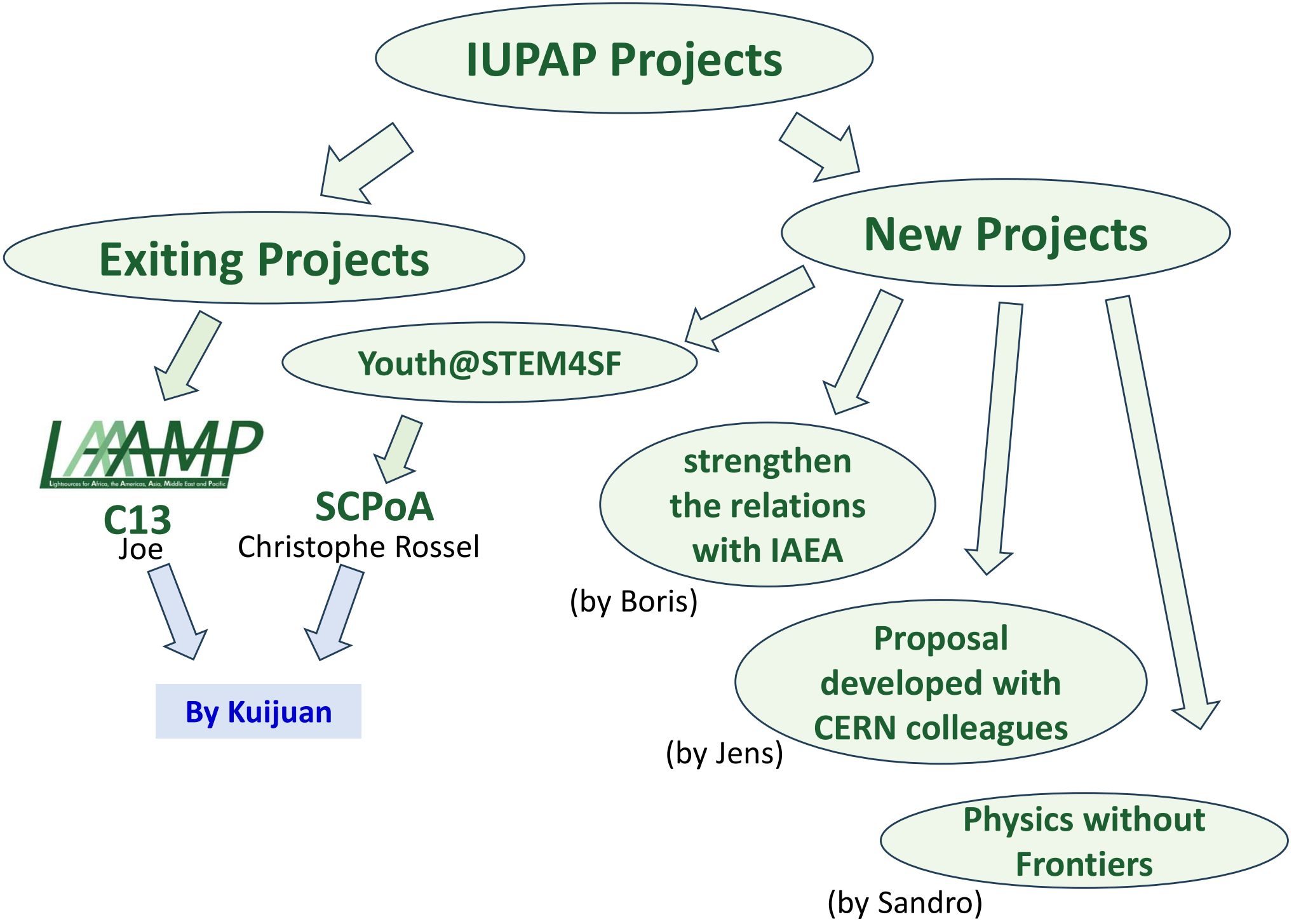
International Union of Pure and Applied Physics

Special Projects and Sponsorship

Kuijuan Jin

Oct. 27, 2026
EC&CC Meting


IUPAP Projects
Exiting Projects
New Projects
Youth@STEM4SF
LAAMP
Lightsources for Africa, the Americas, Asia, Middle East and Pacific
C13
Joe
SCPoA
Christophe Rossel
By Kuijuan
strengthen the relations with IAEA
(by Boris)
Proposal developed with CERN colleagues
(by Jens)
Physics without Frontiers
(by Sandro)

https://laaamp.iucr.org/

The International Union of Pure and Applied Physics

7.5 K Eruos

The International Union of Crystallography

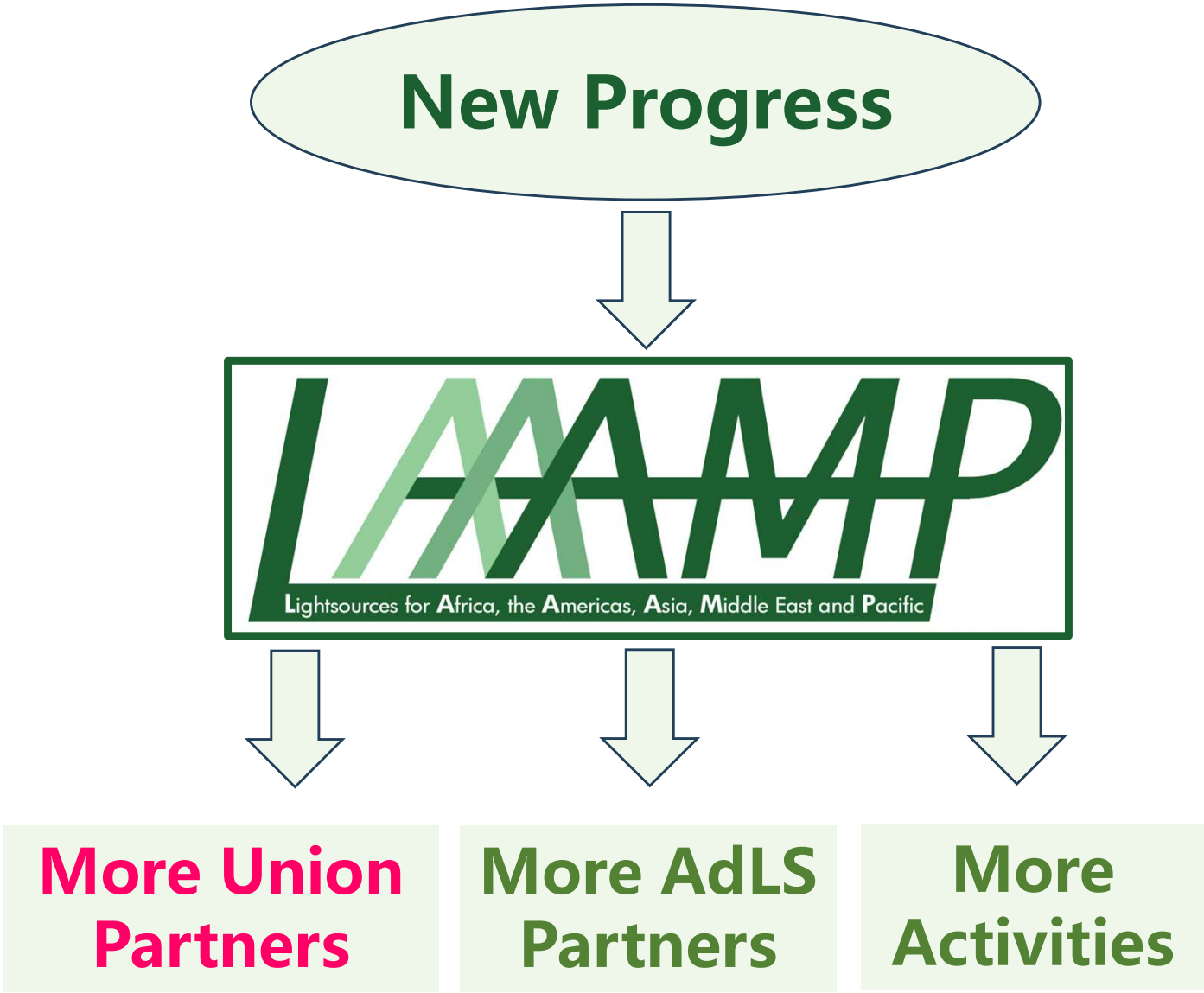
5 K Eruos

The Abdus Salam International Centre for Theoretical Physics

5 K Eruos

Lightsources for Africa, the Americas, Asia, Middle East and Pacific Islands

The project *LAAAMP* was started in 2017 through a grant awarded by the International Science Council (ISC) to the joint IUPAP-IUCr project entitled ***Utilisation of Light Source and Crystallographic Sciences to Facilitate the Enhancement of Knowledge and Improve the Economic and Social Conditions in Targeted Regions of the World***. Aim of the project is to enhance Advanced Light Sources (AdLS) and crystallographic sciences in Africa, Mexico, the Caribbean, South America, Central and Southeast Asia, Middle East and the Pacific Islands.


New Progress
LAAAMP
Lightsources for Africa, the Americas, Asia, Middle East and Pacific
More Union Partners
More AdLS Partners
More Activities

[(LAAAMP) Home](https://laamp.iucr.org/)
https://laamp.iucr.org/

IUPAB JOINS *LAAAMP*

We are happy to welcome IUPAB (International Union for Pure and Applied Biophysics) as a new partner in the *LAAAMP* community.

IUPAB
Connecting the World of BIOPHYSICS

Biophysics plays a critical role in advancing health, materials, and life sciences — and the synergy with light sources and accelerator-based techniques opens exciting avenues for impactful research and training.

It is also a pleasure to announce that **Dr Christina Sizun** has been nominated as the IUPAB representative on the *LAAAMP* Executive Committee. Her expertise and leadership will be a great asset in furthering our shared mission to broaden access to advanced photon and neutron facilities worldwide.

We look forward to working together with IUPAB to strengthen our global network and support emerging communities in science and technology.

Posted 21 May 2025



With the great effort made by Silvina Ponce Dawson



Work with Silvina, Sandro, Joe, and Sekazi

?

International Science Council

IUBS

International Union of Biological Sciences

IUPAC

International Union of Pure and Applied Chemistry

IUPAB

International Union for Pure and Applied Biophysics

IUBMB

International Union of Biochemistry and Molecular Biology

Processing

Prof. Michele Zema has sent the invitation letter to Ehud, but, Ehud hasn‘t replied yet. I also sent an email to Ehud asking for being informed?

Done 5K


New Progress
LAAAMP
Lightsources for Africa, the Americas, Asia, Middle East and Pacific
More Union Partners
More AdLS Partners
More Activities

[(LAAAMP) Home](https://laamp.iucr.org/)
https://laamp.iucr.org/



NEW PARTNER

We are pleased to announce that the **Shanghai Synchrotron Radiation Facility** (SSRF) has officially joined *LAAAMP* as a new AdLS partnering institution, providing another valuable opportunity for FAST Teams.



NEW MEMBER OF *LAAAMP* EXECUTIVE COMMITTEE

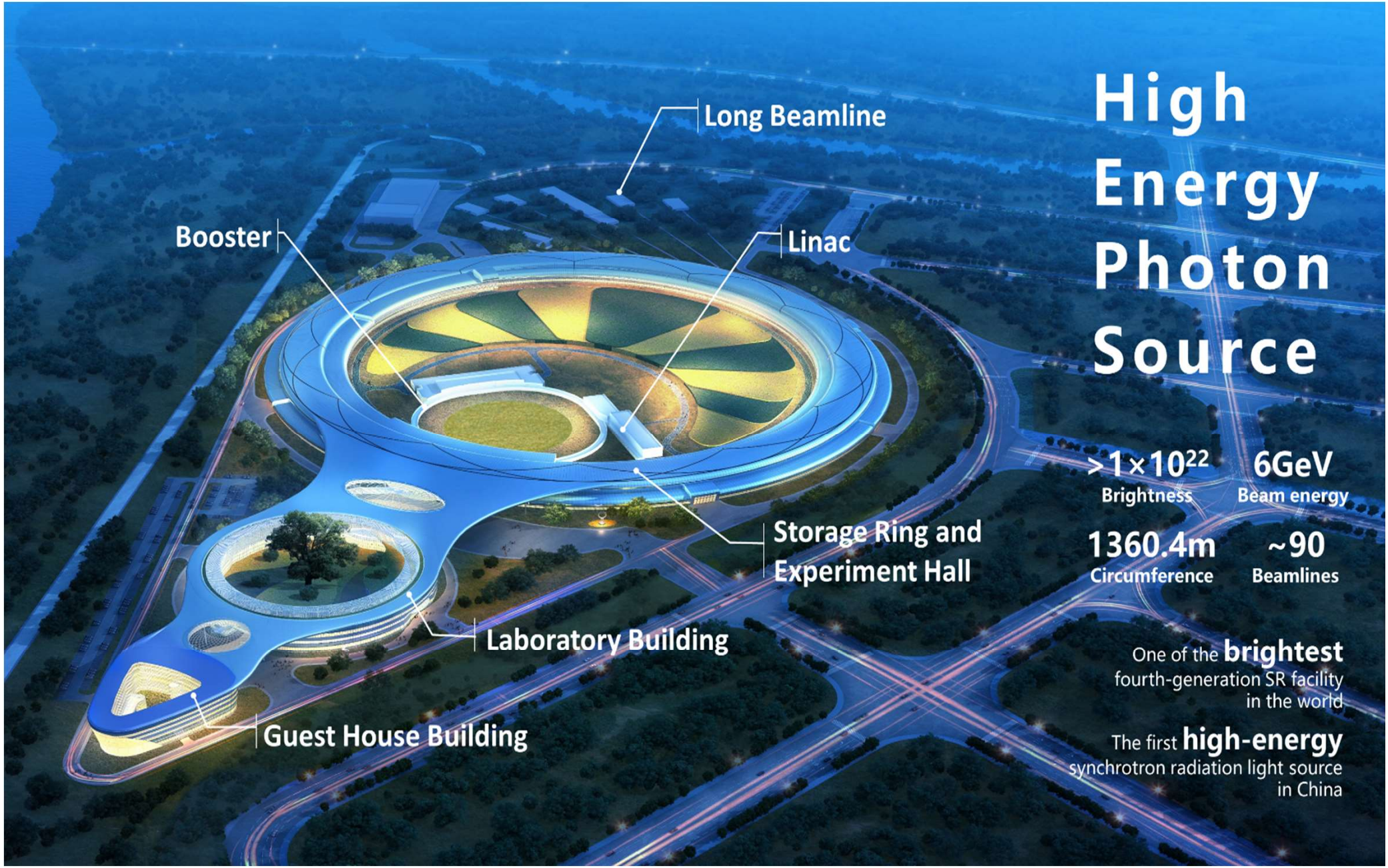
Prof. Er-Jia Guo from the Institute of Physics of the Chinese Academy of Sciences has been nominated as the new IUPAP delegate in the *LAAAMP* Executive Committee. Welcome!



HIGH ENERGY PHOTON SOURCE (HEPS) JOINS *LAAAMP*

We are pleased to welcome the HEPS-High Energy Photon Source facility in Beijing, China as a new *LAAAMP* AdLS partnering facility.

Overview of HEPS



High Energy Photon Source

- **Project outline**
  - A diffraction-limited SR light source (4^{th}-gen)
  - The 1^{st} high-energy SR light source in China
  - **Location**: Huairou Science City, Beijing
  - **Construction time**: June.2019 – **Oct.2025**
  - Land: 650,667 m^2, Building: 125,000 m^2
  - **Budget**: 4.76B CNY (~$652M)

NDRC: National Development and Reform Commission



HEPS, SECUF (Synergized Extreme Condition User Facility), CMP Phase II (Chinese Meridian Project Phase II), EarthLab (the Earth System Numerical Simulation Facility), Multimodal Cross-Scale Biomedical Imaging Facility, HOPE (Human Organ Physiopathology Emulation System)

Series research platforms in energy, environment, biology, materials, etc. **HUAIROU Science City**

HEPS: 1st High-energy SR source in China

Beijing Synchrotron Radiation Facility (1st-gen)



Hefei Light Source (2nd-gen)



Shanghai Synchrotron Radiation Facility (3rd-gen)





High Energy Photon Source

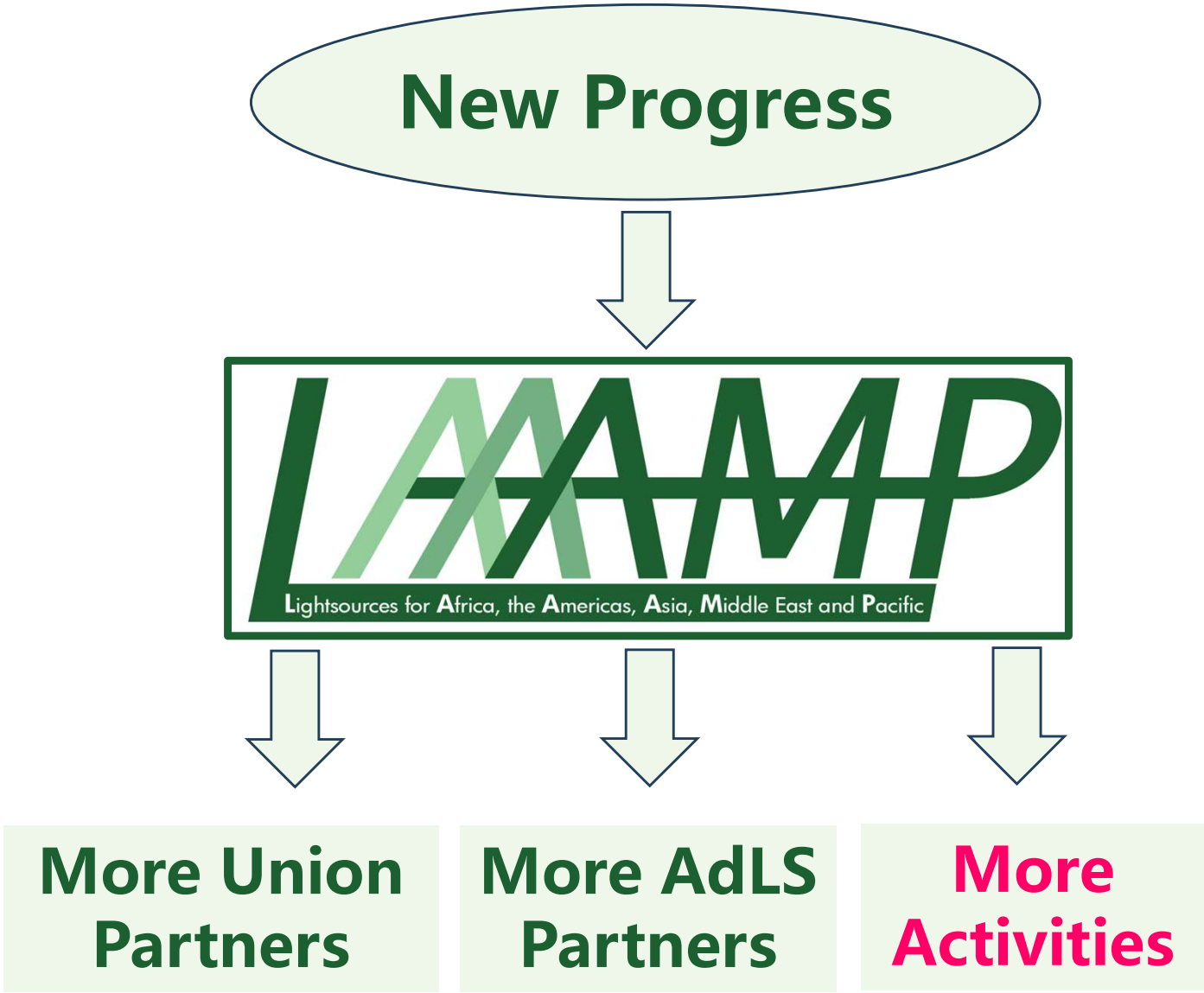


6GeV, In operation

Up to300keV

Hefei Advanced Light Facility




New Progress
LAAAMP
Lightsources for Africa, the Americas, Asia, Middle East and Pacific
More Union Partners
More AdLS Partners
More Activities

(LAAAMP) Home
https://laamp.iucr.org/



SCHOOL ON SYNCHROTRON LIGHT SOURCES AND THEIR APPLICATIONS 2026

The 2026 edition of the ICTP School on Synchrotron Light Sources and their Applications, co-organised by *LAAAMP*, will take place on 12-23 January 2026. The school is online and registration is free. No prior expertise is needed. Application deadline: **5 December 2025**.



BRINGING BIG SCIENCE INTO THE CLASSROOM

Registrations are open for the *LAAAMP* High-School Teachers Workshops 2026, which will be held on **15-19 June** in collaboration with Elettra Sincrotrone Trieste.



LAAAMP SUPPORTS BRIDGE AFRICA

LAAAMP supports the project BRIDGE Africa, funded by Italian Ministry for University and Research under Piano Mattei and G7 Research Capacity Buiding with Africa.

SCPoA ⇨ **Youth@STEM4SF**

Christophe Rossel



Special project of IUPAP

Official initiative for transversal education of

unesco

2024 • 2033
International Decade of Sciences for Sustainable Development

THE EARTH-HUMANITY COALITION

Succesfully piloted & continued in Switzerland from 2023…

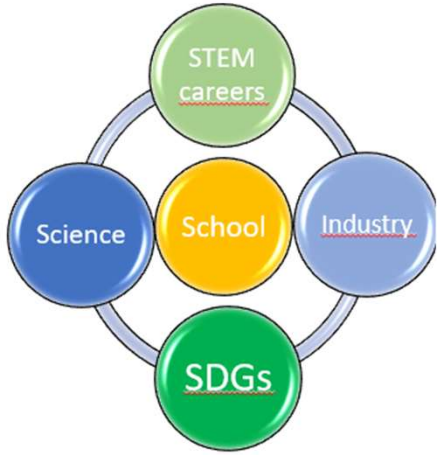
International expansion with IUPAP from 2024 …

Barbora Bruant Gulejova

Youth at STEM for Sustainable Future: inspiring future society leaders!



High school program connecting <u>science with society & sustainability</u> through interaction with <u>industry & scientific role models of both genders</u>.



- Thematic inspirational days with industry visits
- Competition and Follow-up (co-creation Hackathons)
- New missing teaching resources co-creation

2023-2026:
600 students + 20 teachers + 40 role models

STRATEGIC LONG-TERM GOAL: To be embedded into (inter)national curricula

Collaboration with IUPAP in 2024

Big Science Business Forum IUPAP pre-event for high schools

18/03/2024, Trieste: ~ 100 students from Italy and Slovenia, 6 teachers, 13 research/industry role models







Award ceremony for winners of BSBF IUPAP competition

BSBF2024 Satellite Meeting

Tuesday 1 Oct — The role of Academia and Industry to inspire the next STEM generation

9h15 - 13h30

Hall 27 - Ressel

IUPAP WG16 / SCPoA website on outreach published:

https://iupap.org/who-we-are/internal-organization/standing-committees/physics-outside-academia/outreach/

IUPAP International Union of Pure and Applied Physics

INTERNATIONAL YEAR OF Quantum Science and Technology

WEBSITE ARCHIVES
› Before 2015
› 2015 - 2020

Who We Are | Awards | Conferences | Documents | Strategic Plan | News | Search...



WHO WE ARE

MISSION

MEMBERS

INTERNAL ORGANIZATION

GENERAL ASSEMBLY

COMMISSIONS

STANDING COMMITTEES

- Standing Committee on Ethics and Collegiality
- Standing Committee on Diversity, Equality and Inclusion
- Standing Committee on Physics Outside Academia
  - Members
  - Outreach
- Standing Committee on Membership and Development

Home / Who We Are / Internal Organization / Standing Committees / Standing Committee on Physics Outside Academia / Outreach

OUTREACH

Christophe Rossel

Members | Outreach

THE ROLE OF ACADEMIA AND INDUSTRY TO INSPIRE THE NEXT STEM GENERATION: IUPAP SATELLITE EVENT AT BSBF 2024

A satellite event of BSBF, Tuesday 1st of October 9h15-14h, addressed "The role of Academia and Industry to inspire the next STEM generation", with the aim to explore and valorise the potential of the impact of research-industry collaboration to the development of a sustainable society. These subjects have been proven to work as a motivation not only for future employees in STEM related careers, but also for future company leaders and other society stakeholders. Raising the interest of youth for sciences is a concern not only for IUPAP,



Progress in 2025


IN THE SPOTLIGHTS ROLE OF RESEARCH AND INDUSTRY TO ATTRACT FUTURE WORKFORCE

Role of research and industry to attract future workforce . DOI: https://doi.org/10.1051/2025206

Physics community faces a critical challenge to attract future STEM talent. Should we rely solely on ministries of education and outreach programs, or do we have a role to play? How to effectively inspire the next generation? International Decade of Sciences for Sustainable Development (IDSSD) calls for coordinated efforts to tackle this.

novations driven by interplay of physics based science and industry, provide transformative solutions to global societal challenges that meet UN Sustainable Development Goals. Today, many breakthroughs originate outside labs, with private-sector involvement growing (e.g. in nuclear fusion). Innovation is central to leading tech sustainability players in decarbonization, digitalization or transport. Physics-based industries largely contribute to economic growth [1] and around 80% of STEM skilled experts work in business.

Quantum computing, AI and robotics accelerate developments in environmental research, materials science, medicine etc, underscoring rising need for a strong

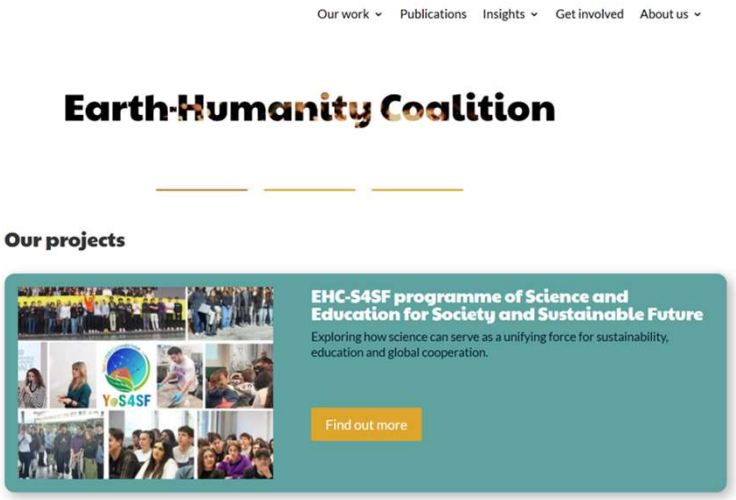
a EPS Forum Roundtable on Societal Challenges "Inspiring new generation of physicists and future ambassadors of science" [3] pledging to create a network of physics-based industrial ambassadors for STEM education. From left: BSBF, CAEN (x2), EPS, GREP, DAPHNE, ARR, YourSciSTEMeSF, CERN, UNESCO.

Leaders at major 2024 events connecting research and industry (EPS Forum and Big Science Business Forum), highlighted the need to inspire qualified talent early and foster societal acceptance for long term ex

The Youth@STEM4SF multistakeholder pioneering program [5], launched under IDSSD and Earth Humanity Coalition, aims to shape STEM education through research industry collaborations' socio eco

April 2025: EPN article about outcomes from Youth@STEM4SF related events by BSBF+IUPAP and EPS Forum in 2024, including new PERIIA program item "Attracting new workforce and knowledge transfer"

April 2025: Earth-Humanity Coalition EHC recognition as initiative for transversal education



May - June 2025 : Several Youth@STEM4SF sessions with Swiss schools in Bienne and Zurich

May 2025: Keynote at National Conference of Swiss Gymnasium Directors

October 2025: Dedicated PERIIA Webinar – Attracting Future STEM Workforce for Big Science Business market - inviting Big Science Business community and other partners to create consortia for EC funding to expand Youth@STEM4SF to more countries

=> Resulting to several Erasmus+ proposals submitted and awarded in 2026

Planned activities 2026/2027

October-December 2026:

- Pilot in Slovakia (www.s4sf.sk) on “AI for Sustainable Development”
- In collaboration with S4SF, IUPAP and Slovak local companies.
- Webinar + co-creation Hackathon will result in the development of
- Digital teaching tool using AI responsibly for sustainable energy use.



27 October 2026: BSBF 2026 IUPAP S4SF Satellite Event: "Attracting future workforce from schools and universities"



Interactive 5 hours session for:

- Researchers
- Companies
- High-school teachers and pupils
- University teachers and students
- Industry Liaison Officers

Outcome: **Official strategic publication**

Big Science Business Forum 2026

IUPAP International Union of Pure and Applied Physics

S4SF SCIENCE FOR SUSTAINABLE FUTURE

BSBF satellite event organized by IUPAP and S4SF

ATTRACTING FUTURE WORKFORCE FROM SCHOOLS AND UNIVERSITIES

EXPLORING STEM CAREER OPPORTUNITIES IN RESEARCH AND INDUSTRY, AND THE ROLE OF SCIENCE AND INNOVATION IN ADDRESSING SOCIETAL CHALLENGES



27 OCTOBER 2026

MAASTRICHT, THE NETHERLANDS

Commission for Physics Development
Standing Committee on Physics outside Academia

Thank you for your attention!