

Proposal for a New Workshop series : PEAKS



Physics of fundamental Symmetries & Interactions



- **Low energy precision tests of the Standard Model**
- **Experiments with muons, pions, neutrons, antiprotons, other particles and atoms**
- **Searches for permanent electric dipole moments**
- **Searches for symmetry violations and new forces**
- Precision measurements of fundamental constants
- Exotic atoms and molecules
- **New tools and facilities**

Scope of the Workshop

The workshop focuses on the physics at the low energy, high precision frontier without neglecting complementary approaches. It aims at highlighting present activities and future developments. The Paul Scherrer Institut (PSI) itself offers unique opportunities for experiments in this realm: it houses the world's most powerful proton cyclotron and the highest intensity low momentum pion and muon beams and the ultracold neutron source.

The PSI2025 workshop will provide an excellent opportunity to explore these exciting topics. It will consist of plenary sessions, including invited introductory presentations to main topics, a poster session, social activities and the opportunity to visit PSI's on-site experimental facilities.

The workshop is being organized by the [Laboratory for Particle Physics at PSI](#) and supported by the Swiss Institute for Particle Physics ([CHIPP](#)), and the Nuclear Physics European Collaboration Committee ([NuPECC](#)) .

- **Every 3 years (first edition in 2007). Latest one took place in 2025 (next 2028)**
- **Large focus on PSI particle physics but includes related topics**
- **Strong International attendance**
- **4.5 days : all plenary & invited**

PEAKS : Physics of Elementary particles, Astroparticles and Key Symmetries

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- Focussed on TRIUMF particle physics : Low/Precision & High Energy component
- Explore the synergies and the complementarities in the New Physics Searches
- Encompass local Nuclear Physics Capabilities (EDMs, sterile neutrinos etc)
- Extend to astroparticle/cosmology (connection with neutrinos/DM pillar, P-ONE etc)?
- Explore potential new directions within those topics

DATES: Every three years, off sync with PSI (i.e. 2027 - 2030 etc)

Klaus Kirch (head of PSI PP and chair of PSI WS series) is enthusiastic about the idea and accepted to join the IAC!

LOCATION: Outside of TRIUMF (ease organization). First considered Whistler, then Sunpeaks

FORMAT: Plenaries, 5 days + poster session

700-800	Breakfast
800-1230	Sessions
1230-400	free
400-500	light dinner
500-800	Sessions

Breakfast & light dinner included in registration

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Started discussion with Sun Peaks Grand Hotel & Conference Centre : they offered very competitive room prices for the period **Nov 30th-Dec 04th 2027**

ROOM TYPES	GROUP NET RATE SINGLE OR DOUBLE
Deluxe King / 2 queen Room	\$199.00 CAD
Deluxe King / 2 Queen with Mountain View	\$239.00 CAD
Deluxe King / 2 Queen with Balcony	\$249.00 CAD
Deluxe King / 2 Queen Balcony and View	\$259.00 CAD
Junior Suite	\$299.00 CAD
Kitchenette Rooms	\$299.00 CAD
One Bedroom Suite	\$299.00 CAD
Two Bedroom Condo	\$499.00 CAD

We should be able to keep registration fees under \$400 (detailed budget upcoming)

PEAKS

— Physics of Elementary particles, —
Astroparticles and Key Symmetries



NOV 30 – DEC 5
2027



LOCATION
SUNPEAKS, CANADA



PHYSICS
AT NEW HEIGHTS

PEAKS-CONFERENCE.CA

SUPPORT THE IDEA OF A NEW WS SERIES?

INTERESTED IN JOINING THE LOC?