Canadian Institute of Nuclear Physics
Institut canadien de physique nucléaire

Newsletter #28, May 2026

The Canadian Institute of Nuclear Physics (CINP) is a formal organization of the Canadian nuclear physics research community to promote excellence in nuclear research and education, and to advocate the interests and goals of the community both domestically and abroad.

1. CINP Executive Director Transition

Dear Colleagues,

It brings me great pleasure to inform you that Dr. Corina Andreoiu of Simon Fraser University has been chosen to be the next Executive Director of the Canadian Institute of Nuclear Physics.

The CINP Executive Director is responsible for managing day-to-day operations of the Institute, provides leadership and support in developing academic programs in nuclear physics across Canada, coordinates CINP input to the subatomic physics long-range plan, and serves as the primary contact between CINP and organizations such as NSERC, CFI, TRIUMF, SNOLAB, MI, IPP, and CAP.

Dr. Andreoiu brings to the role of Executive Director a wealth of more than 25-years experience in nuclear physics in Canada. Dr. Andreoiu was selected by the CINP Board of Directors and ratified by CINP membership through our Institutional Members. Dr. Andreoiu begins a 5-year term on July 1, 2026 and is taking over from CINP Executive Director Dr. Garth Huber after serving in this role for 13-years.

Sincerely,

Dr. Gwen Grinyer
President of the CINP Board of Directors

2. NSERC Support for CINP

NSERC provides funding for many CINP activities through the Subatomic Physics Major Resources Support (SAP-MRS) program. CINP's NSERC grant was renewed last year for 2025-2030.

The awarded amounts are:

FY25-26 and FY26-27 $100,000/yr
FY27-28, 28-29, 29-30 $80-82-84,000/yr

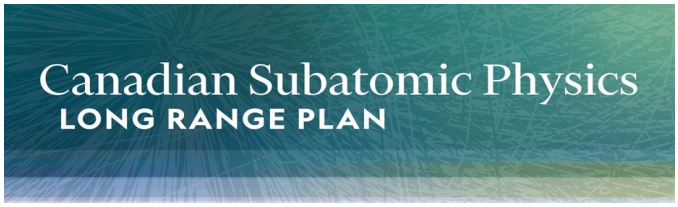
where $23,333 and $13,333 were requested in FY25-26 and FY26-27 for CINP Brief writing and CINP's share (1/3) of Long Range Plan (LRP) expenses.

The CINP Board is following a balanced 5 year budget plan for FY25-29 that was approved last year. As the approved grant was less than previous expenditures, the priority in the plan is to maintain direct student support as much as possible, which meant that other programs either received cuts or were discontinued.

3. Upcoming CINP Sessions at CAP Congress

The CINP and IPP are once again hosting a joint session at the CAP Congress, being held in person at the University of Ottawa and Carleton University.

Tuesday, June 23, 2026 @ U.Ottawa	
12:00-13:30	**Lunch Discussion with NSERC Subatomic Physics Officers** (be sure to preorder your lunch)
Friday, June 26, 2026 @ Carleton U.	
8:00-9:00	**CINP Board Meeting** (by invitation only)
9:15-12:30	**CINP+IPP Joint Session**
	NSERC SAPES Report
	CFI Report
	Subatomic Physics Long Range Plan
	TRIUMF Report
	SNOLAB Report
	McDonald Institute Report
	SAP LRPC Report and Discussion
12:40-13:40	**CINP Individual Members AGM** (be sure to select your lunch option)



4. 2027-2034 Canadian Subatomic Physics Long Range Plan (LRP)

The Long Range Plan Committee (LRPC) has been tasked with developing the community plans and aspirations for the 2027-2034 period and with an outlook to 2041. An important part of the mandate is to "*identify subatomic physics scientific ventures and priorities that should be pursued by the community on a five to fifteen-year horizon and that would ensure continuous Canadian global scientific leadership.*" At the end of Nov. 2025, the LRPC received both the CINP and IPP briefs outlining their respective community plans.

To gain additional data and insights, a community survey was conducted that asked a broad spectrum of questions. We collected 320 responses to the survey with about ½ of them coming from HQP. This was complemented by a series of virtual Town Hall meetings that were held in March on:

- CERN Associate Membership
- Supporting SAP through Computing, Accelerators and Detector R&D
- SAP Benefits to Canada
- HQP (involving HQP only)
- Dark Matter/Dark Sector Physics
- Neutrino Physics (accelerator and non-accelerator based, astrophysical)
- Collider Physics
- QCD and fundamental symmetries (including EIC)
- Nuclear Structure and Nuclear Astrophysics

Additional input has been sought directly from project leaders when there have been significant shifts in the landscape.

The LPRC has been very active, meeting multiple times a week to discuss the planning document itself, as well as strategies for increasing support for subatomic physics (SAP) in Canada. A two-day in-person meeting was held at TRIUMF in April (we extend our thanks to TRIUMF for its support in

hosting) where SAP projects were discussed in depth. The LRPC is currently working on a draft set of recommendations that will be released to the community at the joint CINP/IPP session at CAP Congress in Ottawa.

Alison Lister and Paul Garrett
LRPC Co-Chairs

5. CINP Individual Membership

CINP membership is down modestly from last year. Through to May 15, there were 3 new faculty members and 11 new associates. This was offset by a transfer of 3 faculty to associate, and a loss of 18 associate members (as part of our regular review process to ensure the roster remains up-to-date). The net membership loss is 4.

Please encourage your colleagues, grad students and PDFs to join and contribute to the activities of the Scientific Working Groups (SWGs). The membership form and introduction letter are posted at:
http://cinp.ca/membership

CINP Individual Membership – May 15, 2026			
Total Membership	187 (-4)	Nuclear Astrophysics SWG	72 (-4)
Faculty-class Members	93 (+0)	Nuclear Structure SWG	73 (-6)
Associate Members	94 (-4)	Fundamental Symmetries SWG	92 (+0)
Experimentalists	141 (-4)	Hadronic Physics/QCD SWG	56 (-1)
Theorists	44 (+0)	Nuclear Theory SWG	36 (-1)
		Education & Training SWG	64 (-2)

6. Representation and Input to Various Agencies

The CINP is an advocate and representative of the Canadian nuclear physics community and is asked to attend various meetings or make presentations on its behalf. Some recent and forthcoming activities include:

- The CINP presentation to SAPES took place at their Fall Context Session on Dec 18/25. Thanks to those CINP members who provided scientific updates that were shown there. GH also attended the virtual SAPES Large Projects Day as an observer on Friday Feb 20/26. This meeting is now entirely in-camera, upon request of the international SAPES members.

- Every spring, the CINP Executive Director is asked to suggest new members of the NSERC Subatomic Physics Evaluation Section (SAPES), to replace the specific expertise of outgoing members. **If you have suggestions for replacements of the following 4 members for the 2026-27 competition, please respond to GH ASAP.**

Retiring SAPES Members:
- *Maria Chamizo-Llatas* (Brookhaven National Lab, USA): Exp. Accelerator R&D
- *Maxime Brodeur* (Univ. of Notre Dame, USA): Exp. Nuclear Physics
- *Gordon Semenoff* (UBC): Th. Particle Physics, String & Quantum Field Theory
- *Timothy Sumner (*Imperial College of London, UK): Exp. Astroparticle Physics, Dark Matter

Looking to Recruit SAPES Expertise in:
- exp. nuclear physics
- exp. astroparticle/dark matter
- exp. accelerator R&D
- theor. particle physics

- GH represents CINP on the Pan-Canadian MRS Coordination Board. A decision was made to have CINP and IPP Executive Directors join as co-applicants on the Winnipeg MRS grant application in the 2026 competition, to demonstrate their openness to supporting national projects that are not part of the hosting university. We are pleased to announce that this grant was successfully renewed, after losing support in 2025.

For more information on the available MRS resources, please visit the CINP website https://cinp.ca/subatomic-physics-major-resources-support-facilities

7. CINP Conference Support

The CINP funds conferences/workshops within the nuclear physics thematic area that have a strong Canadian component (i.e. either location or organizers).

Applications are evaluated as follows:

- SWG Chairs relevant to the topic of the conference are asked their opinion on:
- does the conference fall within the area of your SWG?
- is the conference timely and appropriate in terms of scientific merit and impact?
- is it appropriate for the CINP to provide funding? i.e. will this funding further the goals of the CINP?

This evaluation is given to the Board, along with the application, for a final decision on award amount and conditions.

In FY26, two new requests have been funded so far:

- Nuclear Structure 2026 $3800
- 8th International Workshop on the Application of Noble Gas Xenon to Science and Technology (XeSAT) $2000

A small amount remains in the FY26 budget, and we are open to receive applications for next year (FY27 budget).

Within the 5 year budget plan, the conference support program will remain at a constrained level of $7000/year. **For more information, including application forms, please see the CINP website at: https://cinp.ca/conference-support**

8. 2026 CINP Undergraduate Research Scholarships (URS)

The 2026 competition for the URS was recently completed. The intent of the program is to allow gifted undergraduates to work with a supervisor on nuclear physics research for 16 weeks this summer. Each URS is valued at $6000, which must be supplemented by the supervisor by at least $4000, to a total of not less than $1000.

There were 16 applicants to this year's competition and we were only able to fund the top 6. Given the caliber of applicants and the proposed projects, this means the competition was very tight, with a funding much rate lower than the historic norm (~65%). The applications were evaluated by a committee formed of: Dr. Alex Gezerlis (Guelph), Dr. Chris Ruiz (TRIUMF), and GH.

Student	Supervisor	Project Title
Bruce, Elspeth (Calgary)	Friesen, Timothy (Calgary)	Characterizing the ALPHA-3 microwave injection system for anti-hydrogen spectroscopy
Geith, Mackenzie (Toronto-Mississauga)	Longo, Savino (Manitoba)	TUCAN scintillation characterization
Miri, Parmida (UBC)	Behr, John (TRIUMF)	Highly polarized ^{40}K with improved duty cycle for time-reversal tests of ^{47}K
Reyno, Spencer (St Mary's)	Psaltis, Thanassis (St Mary's)	Impact of nuclear reaction rates on classical nova nucleosynthesis
Shickele, Taiki (UBC)	Holt, Jason (TRIUMF)	Calculation of NMEs responsible for light sterile neutrino contributions to 0νββ decay in ^{76}Ge
Thebault-Weiser, Justine (McGill)	Brunner, Thomas (McGill)	Investigation of a broad-mass laser-ablation ion source for fundamental nuclear science

9. 2026 WNPPC Graduate Student Travel Awards

The 2026 WNPPC was held in Banff AB, February 12-15, 2026. CINP offered $750 travel awards to qualified graduate students. The applications were reviewed by a committee of: Dr. Ruben Sandapen (Acadia, Education SWG Chair), Dr. Liliana Caballero (Guelph, CINP Board Member), and Dr. Barry Davids (TRIUMF). There were 18 applications this year for 8 awards, so the competition was very tight, in comparison to the historic success rate of ~70%.

Student	Supervisor	WNPPC Talk Title
Davydov, Artem (Alberta)	Czarnecki, Andrzej (Alberta)	Lifetime of a muon bound to a light nucleus
Ghaly, Filobateer (Calgary)	Friesen, Timothy (Calgary)	Towards demonstrating magnetic trapping of hydrogen in the HAICU experiment
Heinrich, Nathan (Regina)	Huber, Garth (Regina)	GPD factorization in pion electroproduction: PionLT luminosity studies
Junaid, Muhammad (Regina)	Huber, Garth (Regina)	Probing hadron structure with exclusive pion production reaction at Jefferson Lab
Postuma, Alicia (Regina)	Huber, Garth (Regina)	A new angle into the proton: u-channel meson electroproduction
Prajapati, Divyang (St Mary's)	Kanungo, Rituparna (TRIUMF)	Determination of matter radii and neutron skin thickness of neutron-rich isotopes ^{51,52}Ca
Roy, Aritra (St Mary's)	Kanungo, Rituparna (TRIUMF)	Determination of point proton radii of neutron-rich nitrogen isotopes
Todd, Alexander (McGill)	Holt, Jason (TRIUMF)	Ab initio nuclear theory for neutrinoless double-beta decay

10. 2026-27 CINP Graduate Fellowships (GF)

2026 was the 6th year of the Graduate Fellowship program. **Following an extensive discussion with CINP membership at the 2025 CAP Congress, numerous changes were made**, including:

- a change of the fellowship award to enable more awards to be made
- simplifications to the application process, most notably with the introduction of a Narrative CV
- a restriction on the number of awards a supervisor many nominate. Each GF is valued at $10,000.

The awardee's supervisor or home institution must agree to supplement the scholarship from institutional or research funds to a value of not less than $35,000. The student cannot concurrently hold any other major full-time scholarship or fellowship (defined as of equal or higher value than the GF).

In addition to academic and scientific criteria, the Fellowship award has an EDI component, where applicants had to write a 1 page description of what role a PhD student and CINP Graduate Fellow can play in promoting and advancing EDI in our community.

The applications were evaluated by a committee: Dr. Ruben Sandapen, Chair (Acadia), Dr. Andrea Capra (TRIUMF), and Dr. Gwen Grinyer (Regina). A total of 13 applications were received, leading to a success rate of 23%.

The selection committee would like to provide a specific feedback for those considering to apply next year. *"Several of the applicants didn't provide a well-defined research plan. Students typically used this section to give an overview of the physics motivation, the overarching questions of their respective research collaborations, and why it's important. But many didn't describe very well what their specific role was in these larger collaborations and exactly what they will be doing for their research projects over the course of the 1 year of the proposed CINP grad fellowship."*

CINP is pleased to announce the recipients of the 2026-27 Graduate Fellowships:

Samin Majidi (McGill). Samin is working on the development of instrumentation for rare-event searches. The research is situated within the nEXO collaboration, an international effort to serach for neutrinoless double beta decay in xenon—a process whose observation would demonstrate the violation of lepton number conservation and provide clear evidence for physics beyond the Standard Model. Her research focuses on the design, development, and characterization of an optical monitoring and calibration system for the nEXO outer detector, a water Cherenkov muon veto system. Samin is supervised by Erica Caden (SNOLAB/McGill).

Dhruval Shah (McMaster). The focus of Dhruval's work is experimental nuclear astrophysics. His Ph.D. thesis experiment will mainly involve measurements of the ^{20}Ne(α,γ)^{24}Mg reaction, which is an essential part of nucleosynthesis via the alpha-capture chain. This reaction plays an important role during quiescent helium burning in stars and during explosive helium and neon burning in supernovae. The experiment aims to measure this reaction in inverse kinematics, heavy beam on a light target, using the DRAGON spectrometer at TRIUMF. Dhruval works under the supervision of Alan Chen (McMaster).

Sean Wilson (Calgary). Sean's Ph.D. project centers on the development of a novel method to explore an unprobed transition in antihydrogen, to push the precision frontier and place new experimental bounds on CPT invariance. A comparison of the ground-state hyperfine splitting (GS-HFS) of antihydrogen to that of hydrogen is particularly alluring, because of the high precision achieved in corresponding hydrogen measurements, and the unique sensitivity they offer to other nuclear effects (e.g. internal structure of the antiproton). The measurements will produce high precision tests of CPT symmetry with the bonus of sensitivity to nuclear effects. Sean is supervised by Timothy Friesen (Calgary).

After completion of the Graduate Fellowship, the recipient is asked to provide a short report for the CINP Newsletter summarizing the result of their research. We are pleased to present the articles from the 2025 Graduate Fellowship recipients.

11. Shapes of ^{118}Sn unveiled from fast-timing measurements at the Institut Laue Langevin

Frank Wu (SFU),
PhD Supervisor: Corina Andreoiu (SFU)

The shape of a nucleus is a basic property determined by the delicate balance between two competing microscopic effects: pairing interactions and shell effects that drive the nucleus to be spherical, and proton-neutron correlations that drive deformations. Since these effects act on comparable scales, the same nucleus can exhibit different shapes in different states. This phenomenon is called *shape coexistence*. Once thought to be exotic, shape coexistence is now widely understood as a global feature that occurs in all but the lightest nuclei [1].

Traditionally, shape coexistence has mainly been discussed in the context of two shapes, for example, one spherical and another deformed. However, in a handful of instances, such as in some mid-shell Ni, Cd, and Pb isotopes, experimental observations suggested that a single nucleus can have three or more shapes [1]. Commonly referred to as *multiple shape coexistence*, these cases are still considered rare.

The semimagic Z = 50 Sn isotopes have retained on-going interest for shape coexistence because the stable mid-shell Sn nuclei have a large number of valence neutrons above the $g_{9/2}$ (50) shell gap. Interaction with these valence neutrons reduces the energy cost of proton excitations across the $g_{9/2}$ shell gap, which induce deformations. Indeed, this effect is reflected in the excitation-energy systematics of the 2p-2h $0^+_{2,3}$ states as a function of the mass number, A, that shows a parabolic shape with a minimum at the neutron midshell.

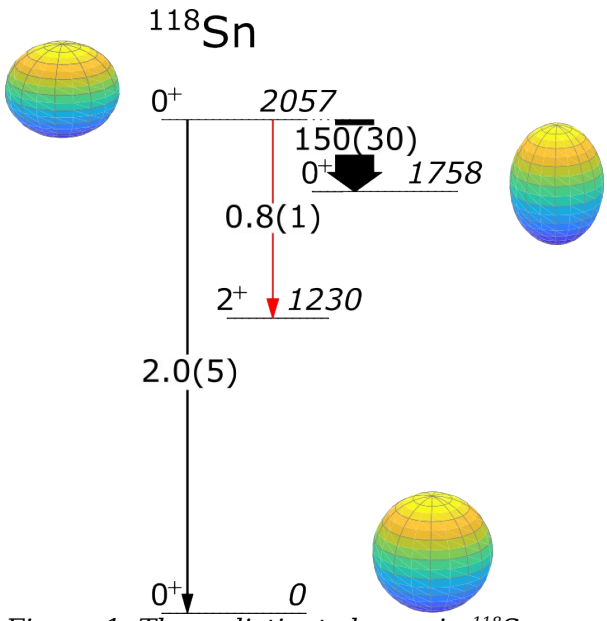


Figure 1: Three distinct shapes in ^{118}Sn supported by our measured enhancement in ρ^2(E0) values and MR-CDFT calculations. Black arrows represent E0 transitions with ρ^2(E0) values in milliunits, while the red arrow is the E2 transition with the B(E2) value labeled in W.u..

Recently, we observed an enhanced electric-monopole strength, ρ^2(E0), from the 0^+_3 to the 0^+_2 state in ^{120}Sn, which was interpreted as direct evidence for shape coexistence between the two excited 0^+ states [2]. As a natural continuation of the project, we continued the investigation into ^{118}Sn. The data analysis and the subsequent publication [3] was completed with the support from the CINP Graduate Fellowship.

The experiment was performed at the Institute Laue Langevin (ILL), where the world's highest flux of continuous thermal neutrons at 10^8 n/cm^2/s was delivered onto an isotopically enriched ^{117}Sn target. Gamma rays emitted following neutron capture were detected in an array of eight HPGe clovers and 15 $LaBr_3$ fast scintillators. In total, ~10^8 events for ^{118}Sn were recorded with HPGe-$LaBr_3$-$LaBr_3$ coincidence. Nearly background-free $LaBr_3$ spectra for the transitions feeding into and decaying out of the 0^+_3 state in ^{118}Sn were obtained by applying a HPGe gate on the primary transition from the capture state. The lifetime of the 0^+_3 state was subsequently determined, for the first time, from the time difference of the $LaBr_3$ signals employing the fast-timing technique.

Using this lifetime, an enhanced ρ^2(E0; $0^+_3 \rightarrow 0^+_2$) of 150(30) miliunits was deduced for ^{118}Sn, which is evidence for large shape difference and strong mixing of the two intruder 0^+ states. Considering that the $0^+_{g.s.}$ state is nearly spherical, our result provides compelling evidence supporting the coexistence of three shapes in ^{118}Sn. Complimentary to our experimental result, three distinct shapes emerged from theoretical calculations based on the quantum-number-projected generator coordinate method employing a relativistic energy density functional. These shapes are illustrated in Fig. 1. More detailed discussions can be found in our Letter in Phys. Rev. C [3].

During the period supported by the CINP Graduate Fellowship, I participated in 17 other experiments at TRIUMF, RIKEN (Japan), the Heavy Ion Laboratory (HIL, Poland), INFN-LNL (Italy), ANL (USA), and ILL (France), which broadened my horizon as an experimental nuclear physicist and allowed me to gain invaluable hands-on experience employing complementary techniques working on some of the most-advanced detector systems in the world.

In addition to the publication [3], I presented our results on Sn at various local and international occasions under the Fellowship period: a guest lecture for NSUC 342 (SFU), two contributed talks at WNPPC 2026 (Banff) and INPC 2025 (Korea), two invited seminars at the Institute of Modern Physics (China) and the HIL (Poland), and an invited talk at the FAST'26 workshop at IFIN-HH (Romania).

[1]. P. Garrett, M. Zielińska, and E. Clément, An experimental view on shape coexistence in nuclei, Prog. Part. Nucl. Phys. 124, 103931 (2022).
[2]. F. Wu, et al., Evidence for shape coexistence in ^{120}Sn from the first 0^+_3 lifetime measurement, Phys. Rev. C 111, L051307 (2025).
[3]. F. Wu, C.R. Ding et al., Multiple shape coexistence near ^{118}Sn: first 0^+_3 lifetime measurement, Phys. Rev. C 113, L051304 (2026).

12. Hybrid Clustering Algorithm for the Barrel Electromagnetic Calorimeter for EIC

Akshaya Vijay (Manitoba)
PhD Supervisor: Wouter Deconinck (Manitoba)

The Electron-Ion Collider (EIC), to be built at Brookhaven National Laboratory, aims to address fundamental questions in nuclear physics, including the origin of nucleon spin and mass, the internal structure of nucleons, and the behavior of dense gluon systems. To meet these goals, the calorimeter requirements for EIC include an energy resolution of $10\%/\sqrt{E}\oplus(2-3)\%$ and precise measurements of electron energy and shower shapes for electron-pion separation in Deep Inelastic Scattering (DIS), along with accurate photon energy and position measurements to identify isolated photons and photon pairs from π^0 decays.

The Barrel Imaging Calorimeter (BIC) for the electron-Proton Ion collider (ePIC) detector for EIC uses a hybrid design that combines lead/scintillating fiber (Pb/ScFi) layers for energy measurement with AstroPix silicon sensors for high-precision position tracking. This setup provides full 3D imaging of particle showers, significantly improving our determination of the transverse and longitudinal shower profile. As a result, the BIC can effectively distinguish photons from π^0 decays even at high momenta (~10 GeV/c).

To utilize this detailed information, clustering algorithms are used to group detector hits into particle-level clusters, enabling reconstruction of energy and position. The hybrid nature of BIC initially used two different clustering algorithms. The imaging layers used a topological clustering method, where hits are grouped using a breadth-first search (BFS) starting from high-energy hits and expanding to nearby hits based on spatial criteria. This method captures the structure of particle showers in high-granularity detectors. The Pb/ScFi layers used an Island Clustering algorithm, which also follows a BFS approach but splits clusters if multiple peaks were identified in the spatial distributions of energy. Shared hits are distributed using energy-weighted methods, improving the separation of nearby particles. Optimizing these algorithms is essential for achieving the best energy resolution, particle identification, and photon reconstruction. To study this, simulation of 2 photons of same energy but different angular separation within a sector of BIC is performed.

With the support of CINP, a hybrid clustering algorithm was implemented to combine both approaches by clustering imaging and ScFi hits separately and then linking by hits across different systems, thereby improving overall reconstruction performance. The clustering performance of this hybrid clustering algorithm is evaluated using cluster energy and cluster count penalty score criteria. Cluster-count penalty is defined as $P=\left|N_{clusters}-N_{true}\right|$, where $N_{clusters}$ is the number of reconstructed clusters in each two-photon event with varying θ_{diff}. A lower penalty indicates better performance, with $P = 0$ corresponding to exactly two reconstructed clusters. Larger values indicate either merging of the two photons into fewer clusters or splitting into additional clusters.

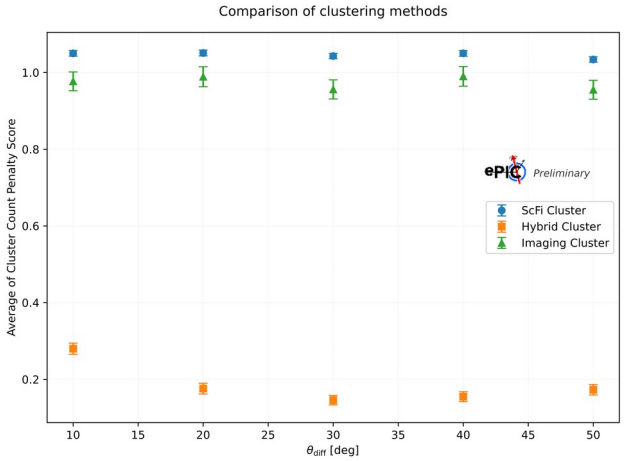


Figure 2: Comparison of clustering methods as a function of angular separation θ_{diff}. Here the y-axis is the average of the total penalty score for the all of the simulated events. This is based on simulations of photons of 500 MeV.

As shown in Fig. 2, the hybrid clustering algorithm consistently achieves the lowest penalty scores across the full range of angular separations, indicating better performance. In contrast, the island clustering based ScFi clusters and topological clustering based imaging clusters show significantly higher penalty

values. The relatively weak dependence on θ_{diff} suggests that the hybrid algorithm is robust across varying event topologies. These results highlight the importance of optimized clustering strategies for improving reconstruction accuracy and particle separation in the BIC.

13. Grad classes offered by TRIUMF

TRIUMF periodically offers a few graduate-level courses, usually in the fall and winter terms, which could be of interest to your students. The courses are run online through UBC or UVic. Typically students would register at their local department in a 'directed studies' or 'special topics' course, though students in western Canada could take advantage of the Western Dean's Agreement to transfer course credit directly.

Students are asked to contact the lecturer directly is they are interesting in taking, or want more information about, the course.

UBC PHYS 505 Nuclear Physics

PHYS 505 Nuclear Physics at UBC will be taught online Jan-April 2027 by Barry Davids and John Behr. Non-UBC students can take it by Western Dean's Agreement, by a similar McGill-Montreal-Toronto-UBC agreement, or with an advisor at the local university. The UBC definition of audit is similar to a pass/fail course.

Nucleons and their structure, hadrons and isospin, two-nucleon systems, the *NN* interaction; bulk properties of nuclei, nuclear excitations and radioactivity, nuclear models; strong and electromagnetic decay, symmetries and weak interaction; nuclear reactions, nuclear astrophysics.

Prerequisites: PHYS 500 Quantum Mechanics I or equivalent (one semester of grad QM)

More detailed syllabus, notes, etc. at:
https://phas.ubc.ca/~behr/phys505/

Contact: John Behr <behr@triumf.ca>

UBC PHYS 560 / UVic PHYS 522 Physics and Engineering of Particle Accelerators

(to be offered in January if there is sufficient demand)

The course will provide an introduction to the physics and technology of particle accelerators concentrating particularly on proton and ion accelerator technology. The course will include a survey of existing accelerator types and an introduction to transverse and longitudinal beam optics. The course will also include an introduction to the physics and technology of ion sources, will give an overview of radioactive ion beam production, of accelerator radio-frequency principles and more detailed aspects of room temperature and superconducting linear accelerators, as well as high energy circular machines. The course should appeal to students of Accelerator Physics, as well as to students of Experimental Nuclear and Particle Physics and other students interested in Particle Accelerators.

Pre-requisites: Classical Mechanics, Classical Electro-dynamics

Contact: Dr. Oliver Kester <okester@triumf.ca> or Dr. Bob Laxdal <lax@triumf.ca>

14. CINP posting of Job Opportunities

We regularly post Nuclear Physics Job Opportunities on the CINP website, at:
https://cinp.ca/announcements

- Researchers looking for positions are encouraged to regularly consult this page.

Please let the Executive Director know if you are recruiting for a position and want your announcement to be distributed.

15. One Guy, four thesis prizes
(submitted by Iris Dillmann,TRIUMF)

Former UBC/TRIUMF PhD student Guy Leckenby, now a postdoctoral researcher at LP2i in Bordeaux, France, has achieved an extraordinary distinction by winning four PhD Thesis Prizes in 2025/26 for his outstanding doctoral research. His thesis focused on the study of the bound-state beta decay of fully ionized $^{205}Tl^{81+}$, based on experiments performed at the GSI/FAIR Experimental Storage Ring (ESR). These high-precision measurements helped to resolve a decades-old puzzle concerning the origin of radioactive ^{205}Pb in our solar system [see G. Leckenby et al., Nature 635, 321 (2024)].

Following his receipt of the GSI Exotic Nuclei Community (GENCO) Award of the FAIR-NUSTAR Collaboration (see CINP Newsletter #26/2025), his work was further recognized with the PhD Award from the Stored Particles Atomic Physics Research Collaboration (SPARC). This exceptional double recognition subsequently earned him the FAIR-GSI PhD Award in December 2025.

In addition, Dr Leckenby was nominated for the 2026 German Physical Society (DPG) Thesis Prize in the Matter and Cosmos section. Competing against other outstanding nominees, he ultimately emerged as the winner.

With these four prestigious honors, the "*Leckenby Quadruple*" has officially been born.

Fourfold congratulations to Guy on this remarkable achievement!

16. Congratulations to Gordon Ball
(submitted by Corina Andreoiu,SFU)

CINP member Gordon Ball has received an honorary degree from Simon Fraser University at their spring convocation, in recognition of his scientific achievements. Since 1997, he has made landmark contributions to high-precision superallowed Fermi beta decay measurements at TRIUMF, providing critical tests of the Standard Model and guiding international research. As a leader, mentor, and innovator, Ball has inspired generations of physicists, and demonstrated the power of curiosity, rigor, and collaboration in advancing scientific knowledge.

17. CINP Board of Directors

The CINP Institutional Members will hold their annual meeting on May 25. One of the agenda items will to elect two Board members. The expiring terms are listed below. Board assigned duties for the coming year will be selected at their June 26 meeting.

Name	Institution	Email	Term Ends
Thomas Brunner	McGill	thomas.brunner @ mcgill.ca	June, 2028
Liliana Caballero	Guelph	ocaballe @ uoguelph.ca	June, 2026
Gwen Grinyer	Regina	gwen.grinyer @ uregina.ca	June, 2027
Svetlana Barkanova	Memorial	sbarkanova @ mun.ca	June, 2028
Russ Mammei	Winnipeg	r.mammei @ uwinnipeg.ca	June, 2026
Chris Ruiz	TRIUMF	ruiz @ triumf.ca	June, 2027

CINP Executive Director:

If you require information about any CINP programs, please do not hesitate to contact:

Until June 30:

Garth Huber, Ph.D.
c/o University of Regina
306-585-4240
huberg@cinp.ca

After July 1:

Corina Andreoiu, Ph.D.
c/o Simon Fraser University
778-782-3946
execdir@cinp.ca

CINP Treasurer:

Greg Hackman
TRIUMF
treasurer@cinp.ca

CINP Institutional Members:

Memorial University of Newfoundland
Saint Mary's University
Mt. Allison University
McGill University
University of Guelph
University of Manitoba
University of Winnipeg
University of Regina
University of Calgary
University of Northern British Columbia
Simon Fraser University
TRIUMF

Scientific Working Group Chairs:

Fundamental Symmetries:
Jeff Martin (Winnipeg)
Hadronic Physics/QCD:
Svetlana Barkanova (Memorial)
Nuclear Astrophysics: Nicole Vassh (TRIUMF)
Nuclear Education and Training:
Ruben Sandapen (Acadia)
Nuclear Structure: Paul Garrett (Guelph)
Nuclear Theory: Alexandros Gezerlis (Guelph)

This Newsletter was edited by Garth Huber. Email regarding the content of this newsletter, or suggestions for content in future CINP newsletters should be sent to the Executive Director