

CANADIAN **SUBATOMIC PHYSICS LONG RANGE PLAN** 2027 - 2034

### LRP FOR 2027 – 2034, WITH 0UTLOOK TO 2041

- LRPC Mandate:
- The Committee is asked to identify subatomic physics scientific ventures and *priorities* that should be pursued by the community on a 7 14-year horizon and that would ensure Canadian global scientific leadership, considering:
  - i. the optimization of the human and financial resources of the Canadian subatomic physics community in terms of research excellence and impact
  - ii. the alignment of research endeavors with the established expertise and strengths of the Canadian community
  - iii. the need to coordinate large projects and collaborations with Canada's international partners in a manner that maximizes scientific excellence and impact
  - iv. the concurrent requirement to maintain and further develop world-class domestic research programs and infrastructure

#### The establishment of priorities will be discussed in more detail at the CINP and IPP Town Hall meetings

- Budgetary estimates, both for new capital investments and for operations, must be provided, including funding ranges for prioritized endeavours.
  - These ranges should include funding levels that would allow for a restrained, yet efficient, contribution to the ventures, as well as levels that would enable a more extensive contribution.

#### LRPC TERMS OF REFERENCE

- Process and Timeline:
- The LRP process will be driven by the Canadian subatomic physics community
- Organized by CINP+IPP, with funding provided by NSERC via SAP-MRS program
- CINP and IPP are tasked to prepare briefs for the LRPC
  - These briefs must summarize the scientific vision and priorities put forward by the sub-communities they represent and serve, including both experimental and theoretical facets
  - Overall recommendations may also be included in the briefs
- The briefs are to be submitted to LRPC no later than November 30, 2025
- Eventual responses to the briefs by individuals or organizations would be accepted.
- Throughout the process, the LRPC may also solicit additional input from various sources, as it sees fit.
- The LRPC will hold public consultations after receiving the briefs
- The LRPC will submit its final report by September 30, 2026

#### LPRC MEMBERSHIP – VOTING MEMBERS

Paul Garrett (Co-Chair)	University of Guelph	Exp. Nuclear Physics
Alison Lister (Co-Chair)	University of British Columbia	Exp. Particle Physics
Torben Ferber	KIT, Germany	Exp. Particle Physics
Alfredo Galindo-Uribarri	ORNL, USA	Exp. Nuclear Physics
Darren Grant	Simon Fraser University	Exp. Astroparticle Physics
David Hornidge	Mount Allison University	Exp. Hadronic Physics
Katelin Schutz	McGill University	Theo. Astroparticle Physics
Hirohisa Tanaka	Standford University, USA	Exp. Neutrino Physics
Nicole Vassh	TRIUMF	Theo. Nuclear Physics
Simon Viel	Carleton University	Exp. Neutrino/DM Physics

LPRC membership selected for their expertise and broad view, and will not promote their own research interests

#### LPRC MEMBERSHIP – NON-VOTING MEMBERS

Carsten Krauss	IPP Director	
Garth Huber	CINP Executive Director	
Kevin Lapointe	NSERC Manager	
Oliver Gagnon	CFI Associate Director	
	Co-Chairs 2026 SAP-ES	
Ritu Kanungo	TRIUMF Representative	
Jodi Cooley	SNOLAB Director	
	MacDonald Institute Director	
	Perimeter Institute representative	

# PROJECTED TIMELINE OF LRPC ACTIVITIES 2025:

- Briefs received by Nov. 30 circulated to LRPC members
- Virtual Town Hall for CINP+IPP Brief presentations (date TBD)

2026:

- Jan. April, LPRC meets on regular periodic basis to consider content and begin to draft LRP report
- April Town Hall
  - Updates on CINP+IPP and other briefs reflecting NSERC, CFI funding decisions, international landscape changes, etc.
  - LRPC feedback to community on emerging community priorities and themes, critical issues
- May June, LRPC meets regularly to discuss recommendations and report content

## PROJECTED TIMELINE OF LRPC ACTIVITIES

2026: (cont.)

- June CAP Congress, LPRC presentation at CAP Congress on status and initial recommendations (if available)
- August Draft LRP report released to community
- August Town Hall
- August Community feedback on draft incorporated
- September Revised LRP report released to community
- September 30 Report submitted to sponsors

#### FORMAT FOR TOWN HALLS

- Two Town Halls are foreseen, in April and August 2026
- Formats were in-person until 2021 when fully on-line
- Initial plan is to continue with virtual meetings, spread over several days to avoid screen fatigue
- A hybrid format can be considered if desired by community plan includes in-person presentation of status at 2026 CAP Congress