

Canadian Subatomic Physics Long Range Plan 2022 - 26

LRP Committee Co-chairs

Brigitte Vachon (McGill) & Adam Ritz (Victoria)

<https://subatomicphysics.ca/>



Canadian Subatomic Physics

Subatomic Physics

Canadian Institute of Nuclear Physics (CINP)

Nuclear structure

Element formation

QCD and hadrons

Fundamental symmetry experiments

Canadian Institute of Particle Physics (IPP)

Precision frontier

High energy frontier

Neutrino properties

Particle astrophysics

Direct dark matter

Canadian SAP community (2015)

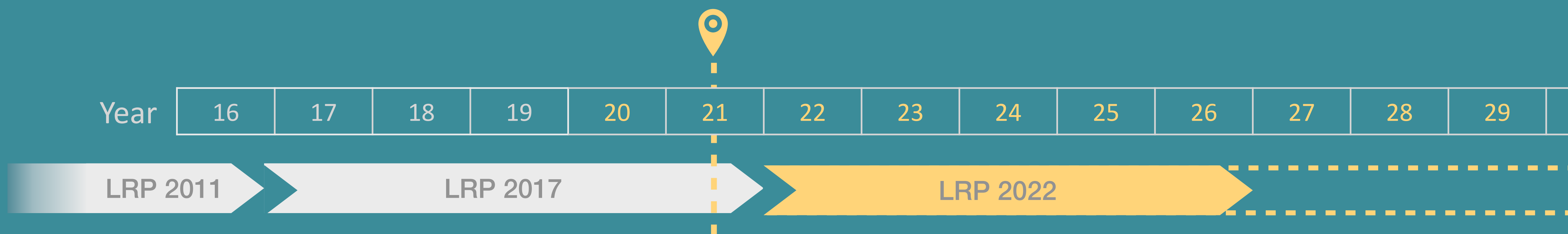
233 grant-eligible researchers
(12% women)

31 Universities

TRIUMF, SNOlab, Perimeter Institute

Subatomic Physics Long Range Plan

- Process through which community expresses its physics aspirations and identifies promising opportunities for Canada to significantly contribute to answering some of the most pressing questions in the field.
 - Goal: Maximize Canadian impact in a global field, given limited resources.
- Commissioning bodies: NSERC, CINF, IPP
- Community-driven process.
- Plan updated every 5 years.
- Next LRP scope is 2022 - 2036; plan active from 2022 - 2026.



LRP Organization

Process organized and coordinated by LRP Committee

LRP Committee Membership

Name	Institution
Adam Ritz (Co-chair)	Victoria
Brigitte Vachon (Co-chair)	McGill
Eckhard Elsen	CERN
Chris Jillings	SNOLAB
Rituparna Kanungo	St Mary's
Bob Laxdal	TRIUMF
Augusto Macchiavelli	LBNL
Juliette Mammei	Manitoba
Jeff Martin	Winnipeg
Niki Saoulidou	Athens
Kate Scholberg	Duke
Alex Wright	Queen's

LRP Committee Ex-officio/observers

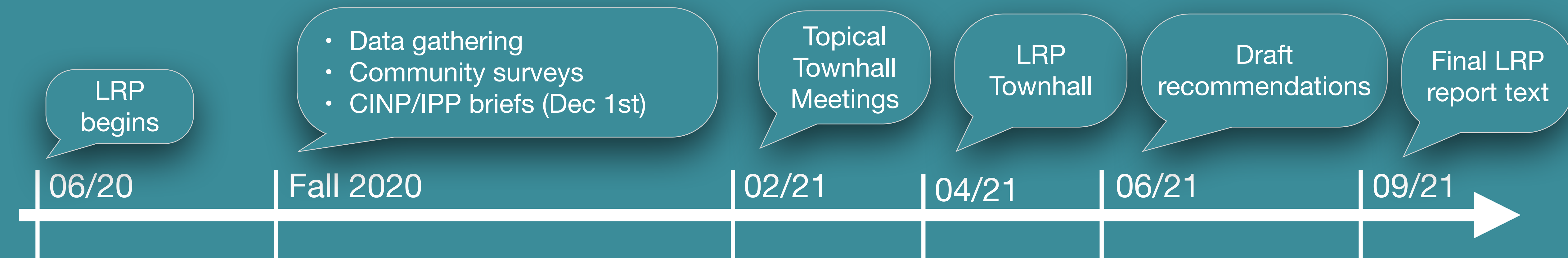
Institution	Name
CINP Executive Director	Garth Huber
IPP Director	J. Michael Roney
NSERC Representative	Kevin Lapointe
NSERC SAPES Co-chairs	Alison Lister, Thomas Grégoire
TRIUMF ALD Physical Sciences	Jens Dilling
SNOLAB Director of Research	Jeter Hall
Perimeter Institute	Cliff Burgess
CFI Manager, John R. Evans Leaders Fund	Olivier Gagnon
Arthur B. McDonald Canadian Astroparticle Physics Research Institute Scientific Director	Tony Noble

LRP Committee Mandate

Based on broad consultation with the Canadian community:

- Identify subatomic physics scientific ventures and priorities that should be pursued by the community on a 5-15 year time horizon and that would ensure continuous Canadian global scientific leadership.
- Provide budgetary estimates (for capital and operations), including funding ranges for prioritized endeavours allowing for (i) a restrained, yet efficient, contribution, and (ii) more extensive involvement.
- Address funding opportunities, the relationship between funding agencies and other organizations, the activities of national research organizations, and the international context.
- Address Equity, Diversity and Inclusion and support for early career researchers within the the subatomic physics community.

LRP Process and Timeline



- Next steps:

- Present draft recommendations at tomorrow's Joint CINP/IPP Session.
- Release of the first LRP report draft (July) for community feedback.
- Final LRP report text in September 2021.

- Community feedback welcome

- Email: LRPC@SubatomicPhysics.ca
- Anonymously, via: <https://www.surveymonkey.ca/r/NTHDFMZ>

- For more information and to join the mailing list: <https://subatomicphysics.ca>

BACKUP SLIDES

Purpose and Value

- **Aim to maximize Canadian impact in a global field, given limited resources...**
- The LRP report **informs** funding agencies of the community's priorities for the field; however, funding agencies still traditionally hold broad peer-review funding competition (e.g. **not mission-driven**).
- The report communicates to international partners (and policy makers) the Canadian plans and priorities, and resource requirements.
- An inclusive planning process that helps to strengthen and coordinate the Canadian SAP community.