# Implementation Plan of the 2025-2029 Strategic Plan

Canadian Association of Physicists

# Programs and Activities

- Membership management
- Congress
- Division support
- PPhys professional certification
- Recognitions program
- Communications with members
- Physics in Canada magazine
- External communications
- Science policy and advocacy
- Undergraduate Lecture Tour
- Affiliated (student) conference support
- Student scholarships
- Student prize exams
- Career resources website
- Job board

# Legend for Initiative Lead

- BD – Board
- CAC - Communications Advisory Committee
- CO – CAP Office
- COC - Communications Operating Committee
- DAA - Director of Academic Affairs
- DC - Director of Communications
- DIA - Director of International Affairs
- DMAS - Director of Members and Affiliate Services
- DO - Director of Outreach
- DPSR - Director of Private Sector Relations
- DPA – Director of Professional Affairs
- DSPA - Director of Science Policy and Advocacy
- DSA - Director of Student Affairs
- EX - Executive
- OC - Outreach Committee
- RC - Recognitions Committee

# Goal 1: Establish the CAP as the voice of physics in Canada

| Strategy | Implementation Plan Goal | Key Initiatives<br>Initiate in Year 1 / Initiate in Years 2-3 / Initiate in Years 4-5 |
|---|---|---|
| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.1 Streamline and enhance internal processes that support the programs and activities | 1.1.1 Document internal processes, following a prioritized list (CO) |
| | | 1.1.2 Create an efficacy matrix: review each program and activity, documenting how it supports the goals of the Strategic Plan, and gather any data to support this, e.g., correlation tying program delivery to retained or increased membership (BD) |
| | | 1.1.3 Collect data on resources used for each program and activity and identify inefficiencies and potential improvements (CO) |
| | | 1.1.4 Survey membership and the extended physics community to gauge their perceived value of each program and activity (BD) |
| | | 1.1.5 Review resource use, survey data and efficacy matrix and assign excellence and sustainability scores (BD) |
| | | 1.1.6 Prioritize the programs and activities according to their excellence and sustainability scores (BD) |
| | | 1.1.7 Develop and implement plans to reduce inefficiencies and enhance higher priority programs. Consider suspending lower priority programs (EX) |
| | | 1.1.8 Evaluate success of changes and modify processes as appropriate (CO) |
| | | 1.1.9 Survey membership and the extended physics community to gauge their level of approval of changes (BD) |
| | | 1.1.10 Review results of survey, re-evaluate internal processes, identify inefficiencies and potential improvements and implement changes (EX) |

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| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.2 Streamline and enhance internal communications | 1.2.1 Review procedures for administrative processes related to communications and consider alternatives (DC, COC, CAC) |
| | | 1.2.2 Track and generate record of internal communications, resource use and uptake (reader receipt data) (CO) |
| | | 1.2.3 Create a communications plan (DC, COC, CAC) |
| | | 1.2.4 Review internal communications records and identify inefficiencies and potential improvements. Implement changes to reduce inefficiencies and enhance communications (DC, COC, CAC) |
| | | 1.2.5 Implement new communications and collaboration platform, as needed (DC, COC, CAC) |
| | | 1.2.6 Evaluate success of changes and modify internal communications processes as appropriate (DC, COC, CAC) |

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| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.3 Enhance external communications and engagements with physicists (members and non-members) and academic administrators in **post-secondary educational institutions** | 1.3.1 Maintain an up-to-date educational institution contact list of science deans, university research officers, presidents and provosts (CO) |
| | | 1.3.2 Prepare science policy communications and circulate to university physics departments and educational institution contact list (DSPA) |
| | | 1.3.3 Reinvigorate the Departmental/Institutional Representative program. Encourage Representatives to regularly give updates on CAP activities in department meetings and other appropriate forums (DAA) |
| | | 1.3.4 Create a graduate education task force to consider and propose programs to support graduate students, such as an up-to-date “job board” of professors seeking new graduate students (DSA/DAA) |
| | | 1.3.5 Create an early-career researcher task force to consider and propose programs to support early-career researchers (DAA/DMAS) |
| | | 1.3.6 Invite Departmental/Institutional Representatives to submit institutional news items, such as new faculty members, major equipment news, new programs, etc., for inclusion in CAP communications (CO) |
| | | 1.3.7 Engage Departmental/Institutional Representatives to send congratulations emails to all graduating physics students (CO) |
| | | 1.3.8 Implement high priority and sustainable programs to support graduate students and early-career researchers (DMAS) |
| | | 1.3.9 Evaluate success of new programs to support graduate students and early-career researchers and modify as appropriate (DAA/DMAS) |

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| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.4 Enhance external communications and engagements with physicists and physics teachers (members and non-members) **in high schools, cégeps and colleges** | 1.4.1 Create a list of provincial high-school, cégep and college physics teacher associations (DSA) |
| | | 1.4.2 Create a task force, including physics teachers, to promote CAP and to develop and implement various programs for the high-school, cégep and college communities (DSA) |
| | | 1.4.3 Create an opt-in database of contact information for high-school, cégep and college physics teachers (DSA) |
| | | 1.4.4 Prepare communications of suitable content, e.g., announcements for events, Congress, teachers' workshops, etc. (DC) |
| | | 1.4.5 Prepare and provide a physics career pamphlet to high-school physics teachers and guidance counsellors (DSA) |
| | | 1.4.6 Evaluate success of new programs for the high-school, cégep and college communities and modify as appropriate (DSA) |

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| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.5 Enhance external communications and engagements with physicists (members and non-members) **in national research institutions** | 1.5.1 Expand science policy collaboration with national research institutions (DSPA) |
| | | 1.5.2 Promote benefits of membership and develop strategies to increase engagement (DMAS) |
| | 1.6 Enhance external communications and engagements with physicists (members and non-members) in **industry** | 1.6.1 Update and maintain the Careers for Physics Graduates website, adding new physicist success stories, etc. (DPSR) |
| | | 1.6.2 Create a task force, including industry physicists, to develop activities of interest to industry and to develop a list of recommendations for comprehensive career support, which could include organization or support of tech conferences, organization or facilitation of short courses or webinars, transitional workshops and specialized training, forums to connect physicists with potential employers for job placement, networking and mentorship, forums to connect academic and non-academic physicists in similar fields for knowledge- and equipment-sharing, etc. (DPSR) |
| | | 1.6.3 Facilitate connections by announcing meetup networking events (DPSR) |
| | | 1.6.4 Prepare and circulate company profiles and celebrations of achievements (DPSR) |
| | | 1.6.5 Develop and implement viable programs recommended by the industry task force (DPSR) |
| | | 1.6.6 Evaluate success of new industry programs and modify as appropriate (DPSR) |

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| **Enhance communications and engagement among the physics community and with external groups and partners** | 1.7 Enhance external communications and engagements with physicists (members and non-members) in **underrepresented groups within the physics community** | 1.7.1 Create a Director of Outreach position (EX/BD) |
| | | 1.7.2 Document current CAP outreach activities promoting physics to underrepresented groups and evaluate their efficacy (DO/OC) |
| | | 1.7.3 Document current government, public sector and private foundation outreach activities to promote STEM to underrepresented groups (DO/OC) |
| | | 1.7.4 Develop and implement engagement strategies specific for each underrepresented group (DO/OC) |
| | | 1.7.5 Evaluate success of new strategies for engagement with underrepresented groups and modify as appropriate (DO/OC) |
| | 1.8 Enhance external communications and engagements with **government** to raise awareness of the benefits and connections of physics with society and the public | 1.8.1 Develop and implement a government relations plan (DSPA) |
| | | 1.8.2 Expand science policy collaboration with Canadian scientific societies, e.g., CASCA (DSPA) |
| | | 1.8.3 Increase science policy advocacy efforts, including active lobbying for funding and policies that support the physics community (DSPA) |
| | 1.9 Enhance external communications and engagements with the **general public** to raise awareness of the benefits and connections of physics with society and the public | 1.9.1 Create a position for a spokesperson with media training (EX/BD) |
| | | 1.9.2 Compile a list of media outlets and establish relationships with those (CO) |
| | | 1.9.3 Create an outreach task force dedicated to implementing a pan-national physics outreach collaboration forum (DO/OC) |
| | | 1.9.4 Coordinate outreach efforts identified by outreach task force (DO/OC) |

# Goal 2: Make the CAP relevant to all members of the physics community, aiming to double the membership

| Strategy | Implementation Plan Goal | Key Initiatives<br>Initiate in Year 1 / Initiate in Years 2-3 / Initiate in Years 4-5 |
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| **Identify, enhance and implement value-added benefits of membership** | 2.1 Engage the national physics community to develop and implement member recruitment and retention plans tailored for each membership category | 2.1.1 Establish the number of physics faculty and correlate to CAP and American Physical Society membership per province, per institution, and per language. Identify and understand overlaps (CO/DIA) |
| | | 2.1.2 Establish a list of cégeps within Québec and colleges outside Québec that have physics departments or that employ physicists as lecturers. Collect data (number of physicists, number of members) at those institutions (CO) |
| | | 2.1.3 Engage Departmental/Institutional Representatives to compile a list of undergraduate and graduate student physics societies and establish relationships with those (DAA) |
| | | 2.1.4 Engage Institutional Representatives to promote CAP to departmental students and colleagues, e.g., post infographics in student lounges, visit third-year quantum mechanics classes, give CAP updates at department meetings, etc. (DAA/DMAS) |
| | | 2.1.5 Invite members who have popular social media channels to share prepared infographics (DC) |
| | | 2.1.6 Assay the broader physics community (members and non-members) in Canada, considering province, language, sector, category, and division (EX) |
| | | 2.1.7 Analyze the membership data and the results from the assay of the physics community and identify priority groups with membership growth potential. Develop recruitment action plans for those priority groups (DMAS) |
| | | 2.1.8 Prepare and circulate targeted infographics highlighting the benefits of CAP membership for each category (DMAS) |

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| **Identify, enhance and implement value-added benefits of membership** | 2.1 Engage the national physics community to develop and implement member recruitment and retention plans tailored for each membership category | 2.1.9 Review existing joint membership agreements with other associations and pursue new joint membership agreements, e.g., with the American Physical Society, as appropriate (EX/DIA) |
| | | 2.1.10 Establish a new forum for physicists and physics teachers at cégeps and colleges (EX/BD) |
| | | 2.1.11 Establish a new forum for representation of French-speaking members (EX/BD) |
| | 2.2 Lead and champion initiatives aimed at supporting the professional and technical development of physics students and physicists at each career stage | 2.2.1 Create a task force, including students and early-career members, to collate a list of relevant professional/technical development programs of other associations and propose new programs, e.g., a next-to-peer mentoring and career coaching program (BD) |
| | | 2.2.2 Create a task force to examine the possibility of offering accreditation of undergraduate physics programs in Canada and to examine the means to facilitate sharing inter-university graduate courses in Canada (BD) |
| | | 2.2.3 Establish new member-run forums for each career stage (undergraduate, graduate, post-doc, early-career faculty, established faculty) (BD) |
| | | 2.2.4 Consider offering online professional development webinars and micro-credential courses led by members (BD) |

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| **Identify, enhance and implement value-added benefits of membership** | 2.3 Become a national online physics resource hub for the public, educators and industry, to support physics education and outreach activities undertaken by members and to help promote interest in physics and physics-related careers | 2.3.1 Establish links with other funding agencies relevant to physics in Canada, e.g., FRQ in Québec, and internationally (DIA) |
| | | 2.3.2 Create a task force, including members from each membership category, to examine the physics resources on the existing website and propose viable and impactful improvements (DAA/DSA/DPSR) |
| | | 2.3.3 Examine collaboration pathways with other institutions with similar goals, e.g., Perimeter Institute (DAA) |
| | | 2.3.4 Develop and implement a staged plan to actualize the suggested improvements to the suite of online physics resources (DAA/DSA/DPSR) |
| | 2.4 Provide members with meaningful experiences and opportunities to volunteer and engage with the CAP and the physics community through these efforts | 2.4.1 Collect and share testimonials of members describing the benefits of volunteering (EX/BD) |
| | | 2.4.2 Maintain on the CAP website and circulate to members, a current list of forums and open positions, inviting members to participate and volunteer (EX/BD) |