

**Canadian Institute of
Nuclear Physics**

**Institut canadien de
physique nucléaire**

2014 Individual Members AGM

June 16, 2014

Sudbury, ON

Agenda

1. Approval of Agenda
2. Compute Canada request for white paper
3. Executive Director's report
4. Financial Report – prepared by Paul Garrett
5. Discussion items:
 - News from Granting Councils
 - Joint CIMP+IPP CREATE grant
 - Ideas for MRS grant renewal
6. Highlights provided by the Scientific Working Groups
7. Comments and Suggestions from the Membership
8. Other Business
9. Adjourn

CINP's Mission

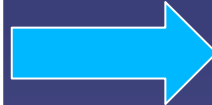
- preparing the research plans of the Canadian Nuclear Physics research community for presentation to bodies such as the NSERC Subatomic Physics Long Range Planning Committee and Subatomic Physics Evaluation Section.
- representing the interests of the Canadian Nuclear Physics community to relevant bodies, in Canada and abroad.
- providing a forum for the advancement of the interests of students and alumni of higher education programs in Nuclear Physics in Canada.
- organizing workshops or other initiatives of interest to the Canadian Nuclear Physics community.
- facilitating Canadian participation in new Nuclear Physics initiatives in Canada and abroad.

CINP Governance

Institutional Members

McGill University
Mount Allison University
Saint Mary's University
TRIUMF
University of Guelph
University of Manitoba
University of Regina
University of Winnipeg

Pay
Annual
Dues
and
Elect
Board



Board of Directors

Jens Dilling
(TRIUMF)
President



Jean Barrette (McGill)

Paul Garrett (Guelph)

Gerald Gwinner
(Manitoba)

Rituparna Kanungo
(St. Mary's)

Jeff Martin (Winnipeg)

Employs
part-time
Exec. Dir.
to oversee
daily affairs
of CINP



Thanks to out-going Board members:
Peter Blunden (Manitoba)
Dave Hornidge (Mt. Allison)

Executive Director

Garth Huber
(Regina)



CINP Individual Membership

- Membership growth of past several years continued in 2013-14.
 - 10 new memberships, but 3 associate memberships not renewed
 - Net gain of +7.
- Many Associate Member applications are associated with Graduate Travel Support Programs.

New Faculty Members:

Iris Dillmann (TRIUMF)
 Alex Gezerlis (Guelph)
 Robert Rutledge (McGill)

New Associate Members:

Martin Acorta (TRIUMF)
 Zafar Ahmed (Regina)
 Nikita Bernier (UBC)
 Steffen Cruz (UBC)
 Alex Galea (Guelph)
 Wenliang Li (Regina)
 Jason Park (UBC)

As of April 30, 2014	Now	1 Year Ago	Change
Faculty Level	72	69	+3
Associate	34	30	+4
Experiment Major Interest	79	74	+5
Theory Major Interest	26	24	+2

Scientific Working Groups (SWG)

- SWGs are intended to facilitate collaboration among researchers with common interests, and to enhance the profile of a specific research area within Canada.
- Individual Members are eligible to apply for membership in one or more SWGs.
 - Activities include:
 - holding topical workshops or other initiatives.
 - input to CIMP external scientific briefs.
 - encouraging new collaborative efforts.
- The CIMP Bylaws require SWGs to be reviewed by the Board every 5 years. This process was done in 2014 and is nearly completed.

Thanks to outgoing SWG Chairs:
Corina Andreiou (SFU)
Barry Davids (TRIUMF)
Kris Starosta (SFU)

Updated SWG Contacts

Working Group	Members	Chair
Nuclear Astrophysics	37	Iris Dillmann (TRIUMF)
Nuclear Structure	49	Adam Garnsworthy (TRIUMF)
Beyond the Standard Model	40	Gerald Gwinner (Manitoba)
Hadrons/QCD	29	Charles Gale (McGill)
Nuclear Physics Education & Training	35	Juliette Mammei (Manitoba)

SWG Chair Duties:

- be the main point-of-contact for the SWG membership.
- help facilitate the CINF scientific program, e.g. contribute material to or suggest authors for the CINF website and newsletter, and help organize workshops.
- help write the CINF Brief for input to the NSERC Subatomic Physics Long Range Plan, and to provide input on other CINF activities, such as the annual presentation at NSERC Large Projects Day and the AGM.
- act as an advisor to the CINF Executive Director on related scientific issues.
- work together with the CINF Executive Director and other SWG Chairs on issues related to funding, long-range planning, and outreach.
- encourage people to join CINF, and to participate in the SWG.

CINP 2013-14 Accomplishments

- **Very successful programs to assist students in presenting their Nuclear Physics research at domestic conferences.**
 - 5 undergraduates supported to Canadian Undergraduate Physics Conference (CUPC) at Hamilton, ON in October.
 - 6 graduate students supported to Winter Nuclear and Particle Physics Conference (WNPPC) at Banff, AB in February.
- **Details on award recipients were circulated in the April 2014 Newsletter.**

CINP 2013-14 Accomplishments

- **For Summer 2014, we implemented the CINP Undergraduate Research Scholarship.**
 - \$3400 student stipend which must be matched by supervisor to a total between \$7-10k.
 - \$1300 travel supplement available if the supervisor intends to send the student to a laboratory or to work with a second collaborator for an extended period.
 - **Applications evaluated by committee:**
 - Peter Blunden (Manitoba), Chair & Board Member
 - Jean Barrette (McGill), Board Member
 - Chris Ruiz (TRIUMF), Non-Board Member
 - **11 applications were received, of which 7 were deemed fundable, and the top 5 of these were awarded.**
- **This program replaced the CINP Graduate Fellowship program awarded in 2013. Total budgets similar.**

CINP 2013-14 Accomplishments

- Conference Support Program remains in high demand.
- **Recently supported conferences:**
 - Nuclear Structure 2014
 - r-Canada Workshop 2014
 - CUPC 2014 (Silver level sponsor)
 - International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions 2015
 - Symposium on Symmetries in Subatomic Physics 2015

CINP 2013-14 Accomplishments

- **CINP (GH) and IPP Director met with officials in Ottawa several times:**
 - **June 20/13:** GH, William Trischuk and Malcolm Butler (LRPC Chair) met with NSERC leadership to discuss reallocation and the international discovery grant review.
 - **Feb 10/14:** GH and Mike Roney (IPP) met with Pierre Charest (new NSERC VP of Grants and Scholarships) to introduce him to our community and press for improved funding.
 - **June 13/14:** GH and Mike Roney met to discuss improved co-ordination between NSERC and CFI and funding for subatomic physics with:
 - Pierre Charest (NSERC)
 - Gilles Patry, President & CEO, CFI
 - Robert Dunlop, Assistant Deputy Minister for Science & Innovation, Industry Canada
 - **Thanks very much to Tim Meyer and Sean Lee (TRIUMF) for providing guidance in advance of the June 13 meeting.**

CINP 2013-14 Accomplishments

- **CINP formally accepted as an observer to NuPECC (Nuclear Physics European Collaboration Committee).**
 - Plan to attend one NuPECC meeting a year, particularly if a suitable representative is already in Europe on other business.
 - Board Member Ritu Kanungo traveled from Germany to Krakow, PL last October and made CINP presentation.
- CINP (GH) attends **Advisory Committee on TRIUMF (ACOT)** meetings in Vancouver twice a year as a “community observer”.
- CINP is invited to make an in-camera presentation to the **NSERC Subatomic Physics Evaluation Section at Large Projects Day** each February.

CINP 2013-14 Accomplishments

- **Conformance with new Non-Profit Corporations (NFP) Act**

- Requires that the CINP submit to Corporations Canada a revised set of bylaws which comply with the requirements of the NFP Act, and if this is not done by Oct 17, 2014 the corporation will be automatically be disbanded.
- We are pleased to report that the CINP has passed this hurdle.

- **As discussed at the 2013 AGM, we also took the opportunity to make some updates to the CINP Bylaws:**

- Revised Associate Member requirements, to allow a former Canadian grad student or PDF to retain their membership for a finite period out of the country, such as taking a PDF offshore.
- Broadened of Affiliate Member requirements, to allow those with an interest in applied nuclear physics to more easily join the CINP.

Certificate of Continuance

Canada Not-for-profit Corporations Act

Certificat de prorogation

*Loi canadienne sur les organisations à but non
lucratif*

Canadian Institute of Nuclear Physics -
Institut Canadien de Physique Nucléaire

Corporate name / Dénomination de l'organisation

447644-1

Corporation number / Numéro de
l'organisation

I HEREBY CERTIFY that the above-named
corporation, the articles of continuance of which
are attached, is continued under section 211 of
the *Canada Not-for-profit Corporations Act*.

JE CERTIFIE que l'organisation susmentionnée,
dont les statuts de prorogation sont joints, a été
prorogée en vertu de l'article 211 de la *Loi
canadienne sur les organisations à but non
lucratif*.



Virginie Ethier

Director / Directeur

2014-05-01

Date of Continuance (YYYY-MM-DD)
Date de prorogation (AAAA-MM-JJ)

2013-14 Financial Report

The CINP has two sources of revenue:

1. NSERC MRS Grant.

- Prescribed use only.
- e.g. Conference support, Scholarships and NSERC-related travel (CINP input to LRPC, Large Projects Day).
- 2014 is final year of 3 year grant: \$22,500.

2. General Operating Funds provided from Institutional Membership dues.

- Used for not-NSERC eligible expenses, such as the room rental fee for this meeting.
- Major expense: Teaching relief coverage for Executive Director.
- Projected revenue for 2014: \$19,000.

Financial Statements - Prepared by Paul Garrett

NSERC Account FY13 (actual)	
FY12 Carry forward	\$6,551
FY13 Installment	\$22,500
Travel	
NuPECC	\$620
CUPC Grad Fair	\$776
SAP Large Projects Day	\$1262
Student Conf Support	
CUPC	\$1772
WNPPC	\$2353
Conference Sponsorship	
ARIEL Workshop 2013	\$1000
CUPC 2013	\$1000
Nuclear Structure 2014	\$4000
Misc	\$845
Total FY13 Expenses	\$12,628

NSERC Account FY14 (projected)	
FY13 Carry forward	\$15,422
FY14 Installment	\$22,500
Undergrad Summer + T.S.	\$20,900
Travel	
ACOT (2 trips)	\$1750
SAP Large Projects Day	\$1300
CUPC Grad Fair	\$700
Other	\$1000
Student Conf Support	
CUPC 2014	\$2000
WNPPC 2015	\$2000
Conference Sponsorship	
r-Canada 2014	\$1000
CUPC 2014	\$1000
Hard Probes 2015	\$4000
Symmetries 2015	\$4000
Projected FY14 Expenses	\$39,650

Financial Statements - Prepared by Paul Garrett

Private Account FY13 (actual)	
FY12 Carry forward	\$75,369
FY13 Dues assessed	\$19,000
Board Expenses	
CAP Congress	\$414
Teleconferences	\$139
CAP Congress AGM	\$223
Executive Director	\$23,333
Finance Expenses	
Bank	\$51
Industry Canada	\$30
Total FY13 Expenses	\$24,190

Private Account FY14 (projected)	
FY14 Carry forward	\$70,179
FY14 Estimated dues	\$19,000
Board Expenses	
CAP Congress	\$150
Teleconferences	\$250
CAP Congress AGM	\$250
Executive Director	\$20,000
Finance Expenses	
Bank	\$60
Industry Canada	\$30
Multi-year audit	\$10,000
Projected FY14 Expenses	\$30,740

Context of Canadian Subatomic Physics Research

- CINF+IPP have raised with NSERC the issue of the discontinued SAPHES site visits, and their value to the committee in understanding research context.
- There is no chance these will be reinstituted, even if travel was paid from the SAP Envelope. However, in response to our requests, some changes will be made.
- The two institutes will now be invited to make two submissions to SAPHES per year:
 - **Policy Meeting (Fall)** Written submission from CINF+IPP on the unique context of subatomic physics research in Canada, with opportunity for committee to ask questions.
 - **Large Projects Day (Feb)** CINF oral presentation on focused on The Breadth of Canadian Nuclear Physics Research and Important Current and Future Priorities.

Context of Canadian Subatomic Physics Research

- **Items likely to be included:**
 - a snapshot of the active subatomic physics research groups across the country.
 - how subatomic physics grad students are supported at small and large universities.
 - how the program requirements and goals of the M.Sc. degree in Canada differ from those in other countries.
 - the respective roles of TRIUMF, regional MRS facilities, and Compute Canada in providing hardware, engineering and computing support.
- No more than 5 pages total, due early September.
- The final document will be publicly available on the CINP website.
- **PLEASE SEND ME MATERIAL!**

NSERC Subatomic Physics Long Range Plan 2017-21

I would be grateful to you if you could bring the following information to the members of the CINP and the IPP during your general meetings on Monday, June 16.

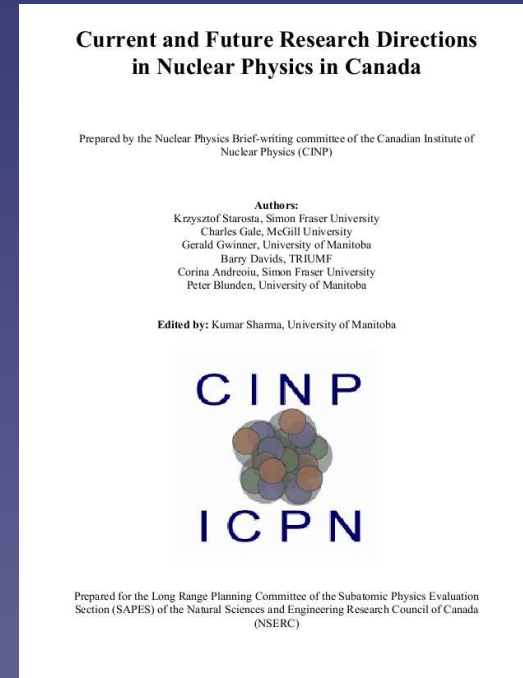
The next Long Range Plan exercise of the Canadian Subatomic Physics community, covering the period 2017-2021, will be launched in early 2015. A Long Range Plan Committee (LRPC) will be established by the spring of 2015. The consultation process of the community is expected to start in the spring/summer 2015 through calls to the CINP and IPP to prepare briefs that should be submitted by the fall of 2015. The LRPC would then lead the consultation of the community up to the summer of 2016. The LRPC will be asked to submit its report to NSERC by the end of 2016.

Since the CINP and the IPP will be asked to engage their members in the spring/summer 2015 and prepare briefs, I suggest that you start planning these activities in the coming months.

All the best,
Samir Boughaba

NSERC Subatomic Physics Long Range Plan 2017-21

- **CINP Brief Preparation Committee:**
 - GH (Chair and Chief Editor)
 - Iris Dillmann (Nuclear Astrophysics)
 - Charles Gale (Hadrons/QCD)
 - Adam Garnsworthy (Nuclear Structure)
 - Gerald Gwinner (Symmetries)
 - Juliette Mammei (HQP issues)
- **Possible Timeline (for discussion):**
 - Call by committee for briefs (March 1, 2015)
 - CINP Town Hall Meeting (two days)
 - Written briefs to be submitted to committee shortly after CINP Town Hall meeting
 - Location? Date? Some possibilities: TRIUMF or Winnipeg (May), Edmonton (weekend before CAP Congress)
 - Committee puts together brief (June-August)
 - bi-weekly teleconferences and one in-person work meeting
 - Draft CINP brief released for comment (Aug 31, 2015)
 - Submission of CINP Brief to LRPC (Sept 30, 2015)



Canada First Research Excellence Fund

- Announced in 2014 Federal Budget to “*position post-secondary institutions to compete with the best in the world for talent and breakthrough discoveries, creating long-term economic advantages for Canada.*”
- \$1.5B over 10 years. FY15: \$50M. FY16: \$100M. FY17: \$150M. \$200M in FY18 and beyond.
- Loosely structured on excellence initiatives of Germany and France. Program details are still being put together by Industry Canada, but likely includes funding for positions, infrastructure and operations in manner.
- Expect a call for proposals by end of year. First competition in FY15.
- **A GOOD OPPORTUNITY TO BUILD UP NUCLEAR PHYSICS RESEARCH AT CANADIAN UNIVERSITIES.**

Canada First Research Excellence Fund

What we know so far:

- Applications will be institutional, as with CFI.
- Large transformational initiatives, only 1-2 priorities per institution. The transformational impact on the institution will be one of the criteria.
- Collaboration between universities to establish broad excellence in a given area will be encouraged, expecting it to be favored in the competition.
 - disciplines with established collaborations and long-term goals (e.g. subatomic physics) might have an advantage.
- Funded proposals must be of **long-term** economic impact to Canada.
 - economic spin-offs of nuclear physics research (e.g. medical isotopes & imaging, electronics & computing, accelerators) could be part of the business case.
- **We are encouraged to talk to our President, VP-R, they will have input on the program parameters.**

Joint CINP+IPP Create Grant

- We are investigating a joint CREATE application between CINP+IPP members, to provide enhanced HQP training opportunities for subatomic physicists, and also to relieve some pressure on the NSERC Subatomic Physics Envelope.

NSERC's Program Requirements:

- Training initiative should provide a value-added experience to the university training environment, to better prepare the research trainees for their future careers in industry, government or academia.
- Majority of CREATE funds are reserved for strategic areas and industrial streams, but some money is available for non-industrial, non-international applications. **It is in this limited category that we would be applying.**
- The CREATE award can be up to \$150k for year 1, \$300k for years 2-6, with a maximum grant total of \$1.65M.
- No less than 80% of the CREATE grant must be spent on trainee salaries; the other 20% can include travel, training materials, program administrator salary, etc.
- There is a two step application procedure. Letters of Intent (LOI) are submitted in the spring, which are evaluated by a special committee and a selection invited to submit a full proposal in the fall.

Joint CINP+IPP Create Grant

NSERC's Program Requirements (continued):

- 1 Lead Investigator and up to 10 Co-Investigators.
- The **VP-Research of the Lead Institution must write a supporting letter** as part of the LOI, clearly confirming that the proposal has been selected as part of that university's quota of CREATE applications, and the university's support and commitment for the initiative, cash or in-kind.
- TRIUMF is not eligible to be a lead institution since it does not grant degrees.
- **The team of co-investigators must provide the necessary expertise for the CREATE program, with specific roles and responsibilities, and their complementarity.**
- **The excellence of this team is one of the major criteria** in the evaluation of whether the LOI proceeds to a full proposal.

Possibilities for CREATE Application

One year Postdoctoral Fellowship:

- Expand research and HQP supervision experience by working with a different research group, either internationally, or nationally.
- Fellows required to participate in a special program in one of three areas:
 1. Accelerator physics via advanced internship at TRIUMF.
 2. Translation of the skill-set of a postdoc in subatomic physics into the private sector economy via a program at a Canadian business school.
 3. Contribute as an instructor and/or tutor for the TRIUMF Summer School or TRISEP School to prepare them for a teaching-based academic career.

Final year of Ph.D. student funding:

- Expand research and interaction experience by working with a different research group, either internationally, or nationally.
- Scholars required to enroll in a special program in one of three areas:
 1. Accelerator physics via internship at TRIUMF.
 2. Translation of the skill-set of a Ph.D. in subatomic physics into the private sector economy via a program at a Canadian business school.
 3. Broad-based exposure to subatomic physics topics beyond their area of training via the TRIUMF Summer School or TRISEP School.

Four month undergraduate fellowship:

- Two months research within a Canadian subatomic physics group.
- Two months with CERN or other similar Summer School Program.

TRIUMF's CREATE Experience

- **ISOSIM – ISOtopes for Science and Medicine CREATE grant approved April, 2014.**
 - **PI: Reiner Kruecken, UBC**
 - **Co-applicants from:**
 - TRIUMF Science & Accelerator Divisions
 - UBC Faculties of Pharmacy, Physics, Chemistry, Earth Sciences
 - **Collaborators from:**
 - Helmholtz Inst., Max Planck Inst., DESY, Siemens Foundation, GE Research
 - UBC Marine Biology, Medicine, Journalism, Business
- **First two applications were not successful:**
 1. **Joint graduate training program in subatomic physics between TRIUMF, Helmholtz Institute and Julich FZ.**
 - Guaranteed German matching funds.
 - TRIUMF put in LOI, but decision made to exclude TRIUMF from CREATE program as not a degree-granting institution.
 - Impossible to know whether the application would have otherwise been successful.
 2. **UBC-centric program in nuclear medicine and nuclear physics.**
 - LOI did not make it through UBC's internal vetting process.
 - Underscores importance to have strong support from central administration.

CREATE Grant Items for Discussion

- **Establish a Joint CINP+IPP Task Force to consider all aspects of the application.**
 - Looking for nominations.
 - Requesting your feedback on the ideas presented so far.
 - Plan for task force to report back to CINP Board + IPP Council before end of year.
- **Consider which university might lead the CREATE program.**
 - Requires strong support from the central administration.
- Explore business schools that might already have a program or is **prepared to create a program that translates the skill-set of a Ph.D. or postdoc in subatomic physics into the private sector economy.**

Ideas for MRS Grant Renewal

- Current NSERC grant:
FY12: \$8.5k. FY13: \$22.5k. FY14: \$22.5k.
- What types of student support and grant support do you think are most effective? Which current programs should be enhanced? Discontinued?
- At Large Projects Day, Paul Reimer asked if there are any plans for CINP to hire Research Scientists, as IPP does. This is a difficult question. What do you think?
- Do you have suggestions for new grant items?

Remaining Agenda Items

6. Highlights provided by the Scientific Working Groups

- Proposal by Gerald Gwinner to rename the Beyond the Standard Model (BtSM) SWG to the Fundamental Symmetries (FunSym) SWG

7. Comments and Suggestions from the Membership

8. Other Business

9. Adjourn