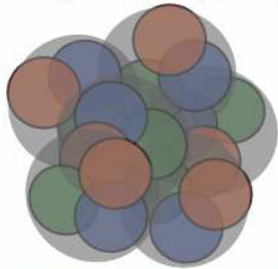


C I N P



I C P N

**Canadian Institute of  
Nuclear Physics**

**Institut canadien de  
physique nucléaire**

**2019 Individual Members AGM**

**June 6, 2019**

**Burnaby, BC**

# Agenda

- 1. Approval of Agenda**
- 2. Guest Presentations**
  - **CUPC 2019 – Yilin Wang**
  - **Carleton/Victoria/Winnipeg MRS Facilities – Blair Jamieson**
- 3. Executive Director's report**
- 4. Financial Report**
  - **Prepared by Iris Dillmann**
- 5. Discussion item**
  - **Input on CINP MRS grant renewal**
- 6. Comments and Suggestions from Membership**
- 7. Adjourn**

# What is the CINP?

- The 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.
  - Federally incorporated under the Canada Not-for-profit Corporations Act.
- Represents researchers covering all aspects of experimental and theoretical nuclear physics. Co-ordinates planning on a national scale and exchanges information within and between the various sub-fields of nuclear physics.
- Leads initiatives to strengthen the level and quality of nuclear physics research in Canada, including fellowships, undergraduate research scholarships, student travel awards, and targeted conference support.

# CINP Membership Classes



## INDIVIDUAL MEMBERS

- Open to any resident of Canada who has sufficient training and competence in the discipline of Nuclear Physics to enable the individual to play a significant role in the activities of the Institute.
- No dues or assessments.

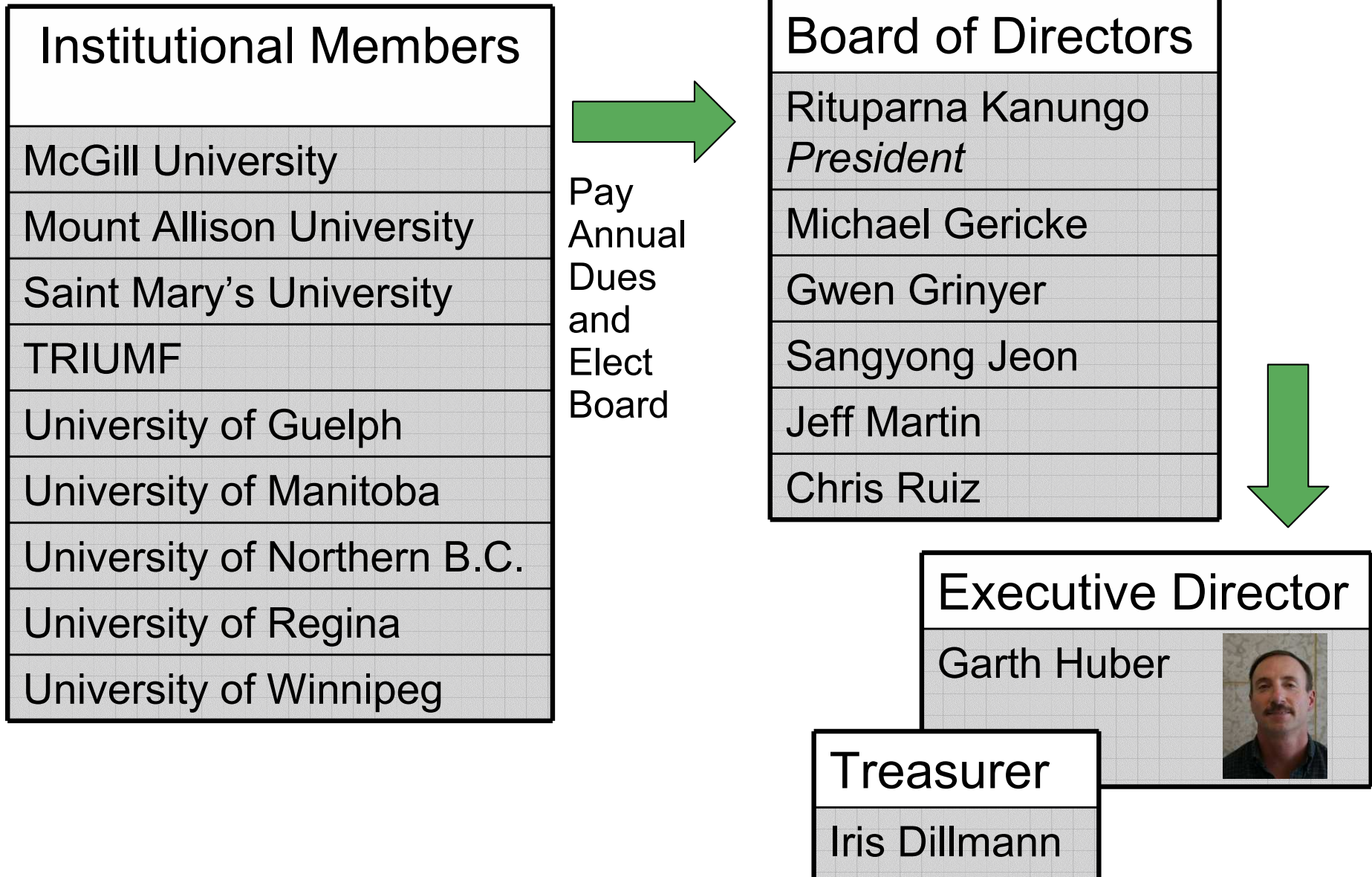
## INSTITUTIONAL MEMBERS

- Universities and laboratories which are actively involved in academic research in Nuclear Physics.
- Meet annually to elect the Directors of the Institute.
- Must pay annual dues as levied by the Board of Directors.

## ASSOCIATE MEMBERS

- Industrial corporations, charitable organizations, etc. with staff members who have expertise in Nuclear Physics.
- Recognition will be based on annual donations.
- Qualified staff members permitted to attend Institute activities.

# CINP Governance



# CINP Individual Membership

- Net gain of 3 members since last year.
  - 7 new Associate Members offset loss of 7 due to 4 leaving the field, 1 gaining a Faculty position in USA (ineligible to continue CINP membership) and 2 transfers to Faculty level status.
- Please encourage your grad students and PDFs to join and contribute to the activities of the CINP!

## New Faculty Members:

Derek Harnett (Fraser Valley)

## Promotions from Associate:

Liliana Caballero (Guelph)

Jennifer Fallis (N.Island College)

## New Associate Members:

Aimee Bell (SFU)

Lucas Darroch (McGill)

Stephen Kay (Regina)

Vijay Kumar (Regina)

Shivani Sharma (Regina)

Karthik Suresh (Regina)

Daniel Yates (UBC)

	Now	1 Year Ago	Change
As of June 6, 2019			
<b>Faculty Level</b>	<b>76</b>	<b>73</b>	<b>+3</b>
<b>Associate</b>	<b>43</b>	<b>43</b>	<b>0</b>
<b>Experiment Major Interest</b>	<b>89</b>	<b>86</b>	<b>+3</b>
<b>Theory Major Interest</b>	<b>29</b>	<b>29</b>	<b>0</b>

# SWG 5 Year Review



- **CINP bylaws require each Scientific Working Group (SWG) be reviewed every 5 yrs.**
  - **Ensures the SWG remain scientifically relevant and that no urgent issue related to CINP mission is neglected.**
  - **We are also looking to develop a stronger role for the SWGs, including enhanced funding for activities, etc.**
  - **This process was last done in 2014 and has just concluded for 2019.**

**Thanks to outgoing Hadrons/QCD SWG Chair:  
Charles Gale (McGill)**

# Updated SWG Contacts



Working Group	Members	Chair
<b>Nuclear Astrophysics</b>	<b>44</b>	<b>Iris Dillmann (TRIUMF)</b>
<b>Nuclear Structure</b>	<b>48</b>	<b>Adam Garnsworthy (TRIUMF)</b>
<b>Fundamental Symmetries</b>	<b>48</b>	<b>Gerald Gwinner (Manitoba)</b>
<b>Hadrons/QCD</b>	<b>43</b>	<b>Svetlana Barkanova (Memorial)</b>
<b>Nuclear Physics Education &amp; Training</b>	<b>41</b>	<b>Juliette Mammei (Manitoba)</b>

## SWG Chair Duties:

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



# CINP 2018–19 Accomplishments

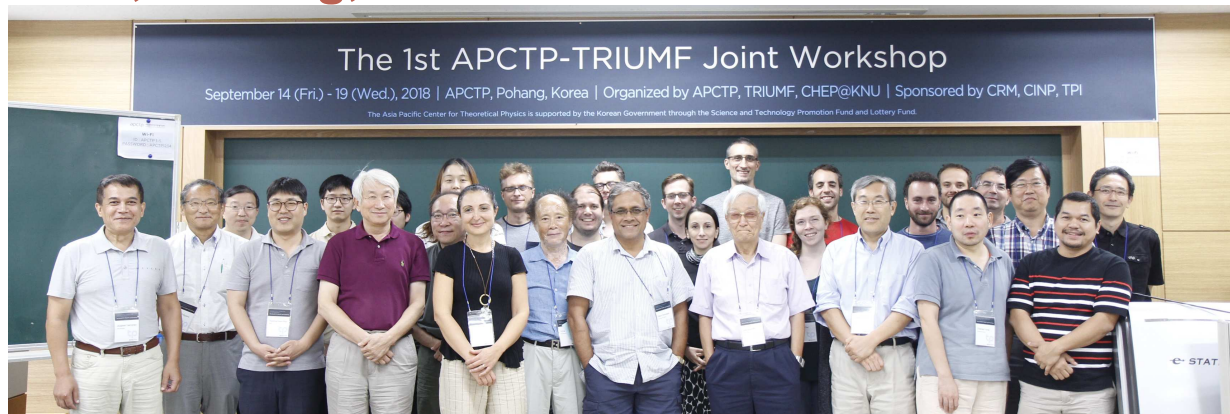


- **Nuclear Physics Representation**

- The CINP has been vital in giving the nuclear physics community a coherent and strong voice
- Meetings with NSERC, CFI, Innovation Science and Economic Development Canada (ISED) on issues of importance to the nuclear physics community
- Joint CINP+IPP “Context Document” for SAPES Fall Policy Meeting
- CINP+IPP submission to ISED on *High Performance Computing*
- NP Community Representative at Advisory Committee on TRIUMF (ACOT), spring and fall annually
- Input to *European Strategy for Particle Physics*
- Astroparticle Community Planning Steering Committee
- Formal observer to NuPECC (Nuclear Physics European Collaboration Committee)
  - Plan to attend one NuPECC meeting a year, particularly if a CINP representative is already in Europe on other business.
  - CINP President, Ritu Kanungo, attended February meeting.

# CINP 2018–19 Accomplishments

- **Successful programs to assist students in presenting their Nuclear Physics research at domestic conferences**
  - 4 undergraduates supported to Canadian Undergraduate Physics Conference (CUPC) at Univ. of Alberta, Edmonton, AB in August, 2018.
  - 6 graduate students supported to Winter Nuclear and Particle Physics Conference (WNPPC) at Banff, AB in February, 2019.
- **Conference Support Program is in high demand**
  - **Theory Canada 2019 Workshop** (specific nuclear physics support)
  - **John d’Auria Memorial Symposium** (student prizes)
  - **Fundamental Neutron Physics Summer School 2018**
  - **2018 Asia Pacific Center for Theoretical Physics (APCTP)–TRIUMF Joint Workshop on “Understanding Nuclei from Different Theoretical Approaches”, Pohang, South Korea**



# CINP 2018–19 Accomplishments



- **CINP Undergraduate Research Scholarships (URS)**

- A supervisor can nominate only their best student for the award.
- \$4k student stipend which must be matched by supervisor to at least \$8k (typically \$8.5k).
- \$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.

- **CINP URS is complementary to the NSERC USRA in several key aspects:**

- 1) Gifted international students studying in Canada are eligible to apply for the CINP URS, but not the NSERC USRA.
- 2) An important element of the URS is the optional Travel Award, which allows the supervisor to send student to a lab or work with second collaborator for an extended period. This can have a significant impact on the quality of the research experience for some undergrads. The NSERC USRA has no such component.

# CINP 2018–19 Accomplishments



## 2019 CINP Undergraduate Research Scholarships

Student	Supervisor	Project Title
Antoine Belley (McGill)	Jason Holt (TRIUMF)	Ab-initio theory for neutrinoless double beta decay nuclear matrix elements
Jenna Chisholm (Mt Allison)	David Hornidge (Mt Allison)	Compton scattering studies at the Mainz Microtron
Mario Tovar (McMaster)	Makoto Fujiwara (TRIUMF)	Development for machine learning based analysis of ALPHA-g TPC
Yilin Wang (McGill)	Thomas Brunner (McGill)	Gas-dynamic calculations for the development of an RF-ion funnel for EXO
Connor Wakefield (Saint Mary's)	Rituparna Kanungo (Saint Mary's)	Investigation of unbound open quantum systems beyond the neutron drip-line

11 applications were received. Selection Committee: Elie Korkmaz (UNBC), Juliette Mammei (Manitoba), Chris Ruiz (TRIUMF). The caliber of the competition was very good, and we regret that we were only able to award 5 scholarships.

# CINP 2018–19 Accomplishments



## Junior Scientist Travel Support Program



- New program implemented in FY18.
- The goal of the JSci program is to allow grad students and PDFs to broaden their research horizon and become more mature scientists.

### Two types of eligible expenditures:

1. **Allow grad students and PDFs to attend specialized workshops and schools not directly related to their research project and hence not normally funded from supervisor's NSERC grant.**
  2. **Enable PDFs to present their work at conferences or workshops, to better position them for successful careers in subatomic physics. Conferences already receiving funds from CINP are not eligible.**
- Applications evaluated by a Standing Committee: CINP ExecDir (GH), Education & Training SWG Chair (J. Mammei), Board Rep (S. Jeon)
  - Program renewed by CINP Board for FY19. Allocated budget increased to \$10k.

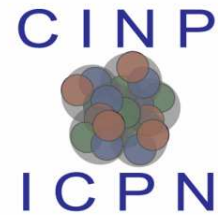
# CINP 2018–19 Accomplishments



## FY18 J.Sci. Awards

Student	Supervisor	Project Title
Ahmed Foda (Regina)	Zisis Papandreou (Regina)	<b>Type 1</b> – INFN School of Statistics, Palermo, Italy (\$2000)
Makut Kalita (TRIUMF)	Gerald Gwinner (Manitoba)	<b>Type 2</b> – Towards parity nonconservation measurements in Francium, SSP2018, Aachen, Germany (\$771)
Florian Kuchler (TRIUMF)	Jeff Martin (Winnipeg)	<b>Type 2</b> – Overview on searchers for EDM, ICNFP, Kolymbari, Greece (\$1000)
Yan Li (McGill)	Charles Gale (McGill)	<b>Type 2</b> – Fluid dynamics of out of equilibrium boost invariant plasmas, ICUNNC, Venice, Italy (\$1000)
Ryohei Matsumiya (TRIUMF)	Jeff Martin (Winnipeg)	<b>Type 2</b> – Cryogenic design for TUCAN UCN source, APS–DNP, Hawaii (\$1000)
Wolfgang Schreyer (TRIUMF)	Jeff Martin (Winnipeg)	<b>Type 2</b> – Producing ultracold neutrons with a spallation source and superfluid Helium, APS–DNP, Hawaii (\$1000)

# CINP 2018–19 Accomplishments



## • Community Outreach.

- CINP facilitates new connections and allows the disparate Canadian nuclear physics community to develop a common identity.
- CINP website <http://www.cinp.ca/> moved to new server at TRIUMF.
- 2 Newsletters annually.

Information and News

- Announcements
- Newsletter
- Job Opportunities
- Conference Support
- Conferences & Schools
- AGM slides
- CINP White Papers

Important Links

- Subatomic Physics Long Range Plan
- NSERC News
- SAPES Chair Reports (2010-)
- GSC-19 Chair Reports (2001-09)
- IUPAP Working Group WG.9
- DNP Site

Welcome

Mission

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

**Canadian Institute of Nuclear Physics**  
**Institut canadien de physique nucléaire**

Newsletter #13, November 2018

*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 Board of Directors (2018-19)

The CINP Institutional Members had their annual meeting via teleconference on May 4, 2018. One of the agenda items was to elect two new Board members. The new Board is listed below, along with their assigned responsibilities.

Name	Institution	Role	E-mail	Term Ends
Michael Gericke	University of Manitoba		mgericke @ physics.umanitoba.ca	June, 2020
GF Grinyer	University of Regina		gf.grinyer @ uregina.ca	June, 2021
Sangyong Jeon	McGill University	Secretary	jeon @ physics.mcgill.ca	June, 2019
Ritupama Kanungo	Saint Mary's University	President	ritu @ triumph.ca	June, 2019

### 2. Undergraduate Student Conference Support

The CINP awarded four \$500 travel grants to support undergraduate students giving talks on nuclear physics related projects at the 2018 Canadian Undergraduate Physics Conference (CUPC) held at the University of Alberta in Edmonton, AB on August 15-18, 2018. The applications were evaluated by: Drs. Chris Ruiz (TRIUMF) and Garth Huber (Regina/CINP).

Student	Supervisor	CUPC Talk Title
Antoine Belley (McGill)	Thomas Brunner (McGill)	Development of an electroluminescent light source to characterize SiPMs for nEXO
Dixin Chen	Thomas Brunner	Performing experiments on a laser ablation ion

# New Treasurer Transition

- **Iris Dillmann** has requested her term to finish at the end of the current NSERC grant (Mar 31, 2020).
- **Greg Hackman** has been appointed as *Treasurer–Elect*. He will work with GH on the new NSERC application this fall, and take over full Treasurer duties on Apr 1.
- The last Financial Audit was completed by Collins–Barrow (Guelph) for FY08–14. With Iris’ term ending, we have decided to conduct a Financial Review Engagement for FY19. McLean–Bartok–Edwards (Vancouver) have been contacted for this purpose.
- **Shirley Reeve** (formerly of TRIUMF) is working with Iris on putting together proper financial templates to be used in our annual filings with Revenue Canada. She has also made various recommendations on improvements to our procedures.



# CINP NSERC Expenditures

– Prepared by Iris Dillmann



FY18 (actual)	
FY17 Carry forward	11,333
FY18 Installment	46,000
<b>Representation Travel</b>	<b>5,775</b>
ACOT (2 trips)	1,543
SAP Large Project Day	1,186
Other Domestic	820
NuPECC	2,225
<b>Conference Sponsorship</b>	<b>4,750</b>
<b>Undergrad Res Scholarships</b>	<b>20,000</b>
<b>URS Travel Supplements</b>	<b>2,483</b>
<b>Student Conf Support</b>	<b>5,570</b>
CUPC 2018	1,970
WNPPC 2019	3,600
<b>Junior Sci Travel Support</b>	<b>6,771</b>
<b>Misc</b>	<b>2,000</b>
Year End Balance	9,984

FY19 (budgeted)	
FY18 Carry forward	9,984
FY19 Installment	48,000
<b>Representation Travel</b>	<b>6,300</b>
ACOT (2 trips)	1,700
SAP Large Project Day	1,300
Other Domestic	1,300
NuPECC	2,000
<b>Conference Sponsorship</b>	<b>7,000</b>
<b>Undergrad Res Scholarships</b>	<b>20,000</b>
<b>URS Travel Supplements</b>	<b>3,900</b>
<b>Student Conf Travel</b>	<b>6,600</b>
CUPC 2019	2,400
WNPPC 2020	4,200
<b>Junior Sci Travel Support</b>	<b>10,000</b>
<b>Misc</b>	<b>1,100</b>
Projected Year End Balance	3,084

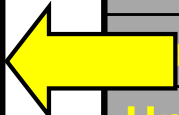
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– Prepared by Iris Dillmann



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Year End Balance	9,984

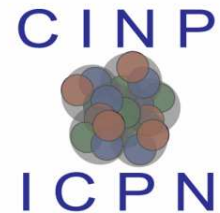
FY19 (budgeted)	
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Other Domestic	1,300
NuPECC	2,000
Conference Sponsorship	7,000
Undergrad Res Scholarships	20,000
URS Travel Supplements	3,900
Student Conf Travel	6,600
CUPC 2019	2,400
WNPPC 2020	4,200
Junior Sci Travel Support	10,000
Misc	1,100
Projected Year End Balance	3,084



Additional \$2500 in approved Conference Funds not used due to unmet award criteria.

# CINP Private Account

– Prepared by Iris Dillmann



FY18 (actual)	
FY17 Carry forward	\$49,629
FY18 Dues assessed	\$21,000
Board Meeting Expenses	\$38
Executive Director	\$23,000
Finance Expenses	
Bank	\$0
Industry Canada	\$0
Total FY18 Expenses	\$23,038
Year End Balance	\$47,591

FY19 (budgeted)	
FY18 Carry forward	\$47,591
FY19 Dues assessed	\$21,500
Board Meeting Expenses	\$180
Executive Director	\$23,500
Finance Expenses	
Bank	\$100
Industry Canada	\$20
Tax Filing	\$1000
Financial Review	\$3000
Total FY19 Expenses	\$27,800
Projected Year End Balance	\$41,291

- **Undergraduate Research Scholarships**
  - CINP's biggest program
  - First competition in 2014
    - Applications:  $11.7 \pm 1.5$  over 6 competitions
    - 5 Awards/year (mean success rate: 42%)
  - Award: \$3400 → \$3500 → \$3600 → \$4000
  - Travel award \$1300 unchanged since 2014
  - **Should we ask for funds to increase the program to 7 awards/year ?**
  - **Is the Award amount competitive?**

# Discussion Item – NSERC renewal

- **Grad Student Travel Awards to WNPPC**
  - 70% increase in applications (FY16–19 vs FY13–15)
  - Should we increase to 8 awards?
  - Is award amount appropriate?

Fiscal Year	Applications	Awards
2013	7	6 x \$500
2014	6	4 x \$500
2015	4	4 x \$500
2016	10	4 x \$500
2017	9	6 x \$500
2018	10	6 x \$600

- **Undergrad Student Travel Awards to CUPC**
  - Seems to depend greatly on when and where the conference is.  
Large spike in applications in 2014
  - Keep at 4?
  - Be more flexible in #Awards?

Fiscal Year	Applications	Awards
2013	5	5 x \$500
2014	12	4 x \$500
2015	4	4 x \$500
2016	3	3 x \$500
2017	6	4 x \$500
2018	5	4 x \$500

# Agenda Items

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- 6. Comments and Suggestions from the Membership**
- 7. Adjourn**