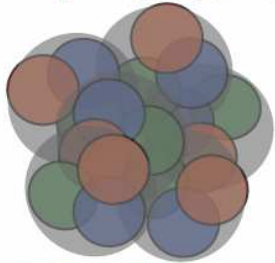


C I N P



I C P N

**Canadian Institute of  
Nuclear Physics**

**Institut canadien de  
physique nucléaire**

**2020 Individual Members AGM**

**June 10, 2020**

**Virtually by Zoom**

# Agenda

1. **Executive Director's report**
2. **Financial Report**
  - **Prepared by Greg Hackman**
3. **SAP MRS Resources**
  - **Fabrice Retiere**
4. **Comments and Suggestions from Membership**
5. **Adjourn to Virtual DNP Business Meeting**

# 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.

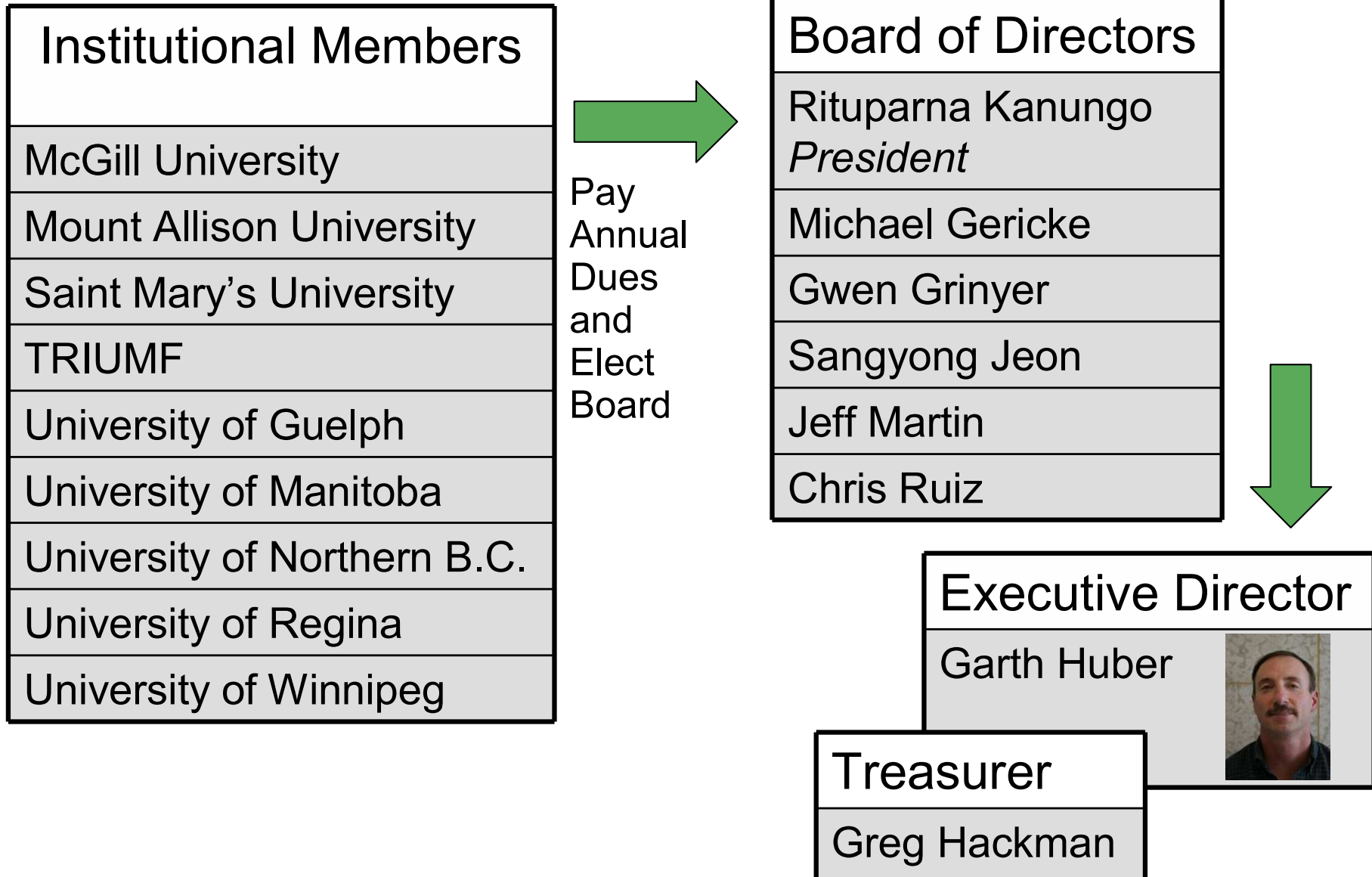
## INSTITUTIONAL MEMBERS

- 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 12 members since last year.
  - 12 new Associate Members offset loss of 4 due to leaving field.
  - 4 new Faculty Members offset loss of 1 leaving Canada.
- Please encourage your grad students and PDFs to join and contribute to the activities of the CINP!

## New Faculty Members:

Greg Christian (Saint Mary's)  
 Wouter Deconinck (Manitoba)  
 Jacques Farine (Laurentian)  
 Nigel Smith (SNOLab)

## New Associate Members:

C. Griffin (TRIUMF)      K. Kapoor (Regina)  
 V. Neelamana (Regina)      K. Ortner (SFU)  
 J. Refsgaard (TRIUMF)      N. Saei (Regina)  
 S. Sharma (Regina)  
 A. Talebitaher (Regina)  
 A. Usman (Regina)  
 D. Walter (St. Mary's)  
 S. Yukiya (UBC)  
 J. Zarling (Regina)

	Now	1 Year Ago	Change
As of May 1, 2020			
<b>Faculty Level</b>	<b>79</b>	<b>76</b>	<b>+3</b>
<b>Associate</b>	<b>50</b>	<b>42</b>	<b>+8</b>
<b>Experiment Major Interest</b>	<b>101</b>	<b>88</b>	<b>+13</b>
<b>Theory Major Interest</b>	<b>27</b>	<b>29</b>	<b>-2</b>

# Scientific Working Groups

Working Group	Members	Chair
<b>Nuclear Astrophysics</b>	<b>47</b>	<b>Iris Dillmann (TRIUMF)</b>
<b>Nuclear Structure</b>	<b>53</b>	<b>Adam Garnsworthy (TRIUMF)</b>
<b>Fundamental Symmetries</b>	<b>53</b>	<b>Gerald Gwinner (Manitoba)</b>
<b>Hadrons/QCD</b>	<b>45</b>	<b>Svetlana Barkanova (Memorial)</b>
<b>Nuclear Physics Education &amp; Training</b>	<b>42</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 2019–20 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
- NP Community Representative at Advisory Committee on TRIUMF (ACOT), spring and fall annually
- Astroparticle Community Planning Steering Committee
- UVic-Carleton-Winnipeg MRS Committee
- Formal observer to NuPECC (Nuclear Physics European Collaboration Committee)
  - CINP President, Ritu Kanungo, typically attends 1 meeting/year.



# CINP 2019–20 Accomplishments



- **Conference Support Program is in high demand**
- **2019 funded:**
  - Theory Canada 2019 Workshop (specific nuclear physics support)
  - John d’Auria Memorial Symposium (student prizes)
  - Stopping and Manipulation of Ions 2019



- **2020 funded or applied for (so far):**
  - Nuclear Shape Coexistence Workshop (delayed to 2021) Guelph, ON
  - Joint APCTP–TRIUMF workshop

The 2nd APCTP-TRIUMF Joint Workshop "Understanding Nuclei from Different Theoretical Approaches"

August 24 (Mon), 2020 ~ August 28 (Fri), 2020, TRIUMF, Vancouver, Canada

# CINP 2019–20 Accomplishments



## • Community Outreach

- CINP facilitates new connections and allows the disparate Canadian nuclear physics community to develop a common identity.
- CINP website <http://cinp.ca/> upgraded, content added regularly.
- 2 Newsletters annually.

The screenshot shows the CINP website homepage. At the top left is the CINP ICPN logo. To its right, the text reads "Canadian Institute of Nuclear Physics" and "Institut Canadien de Physique Nucléaire". Below this is a navigation menu with links for Home, About CINP, Nuclear Physics, Programs, Outreach, Membership, and Governance. On the left side, there are three main sections: "Information and News" with links for Jobs / Announcements, Newsletters, Conference Support, AGM slides, and CINP White Papers; "Scientific Working Groups" with links for Overview, Nuclear Astrophysics, Nuclear Structure, Fundamental Symmetries, Hadronic Physics/QCD, and Education and Training; and "Important Links" with links for Subatomic Physics Long Range Plan, NSERC News, SAPES Chair Reports (2010-), GSC-19 Chair Reports (2001-09), and IUPAP Working Group WG.9. In the center, there is a large image of the GRIFFIN detector with the caption "GRIFFIN with DESCANT and SCEPTAR". Below the image is a row of six dots, with the first one filled. At the bottom, there is a small paragraph of text: "The Canadian Institute of Nuclear Physics 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."



## 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@triumf.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

# CINP 2019–20 Accomplishments



- CINP Board approved statement:

*“CINP is committed to ensuring equitable access to its resources, and promoting EDI in the Canadian nuclear physics community, recognizing that this will contribute to more robust research and education outcomes”*

- By far the largest component of the CINP’s MRS grant is devoted to HQP support.
- Diversity is taken into consideration in the awarding of funds.

# CINP 2019–20 Accomplishments



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

- A supervisor can nominate only their best student for the award.
- \$5k student stipend which must be matched by supervisor to at least \$9k (typically \$9.5k).
- \$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.

# 2020 URS Program Improvements



- **One of the goals of the CINP is to help attract a new generation of students to the field. The URS program is vital to this goal.**
- **Application and Success Rate Data:**
  - Applications:  $11.7 \pm 1.5$  over 6 competitions (since 2014)
  - 5 Awards/year (mean success rate: 42%)
  - Females are 20% of applicants, received 33% of awards. Clearly the caliber of female applicants is very high.
- **Award amount increased only slowly to 2018:**  
\$3.4k(fy14,15) → \$3.5k(fy16) → \$3.6k(fy17) → \$4k(fy18)
  - With increases in minimum wage to \$15/hr in several provinces, it was noted total award (CINP+supervisor) was below minimum wage in these provinces.
  - **Strong reason to increase award amount to \$5k in 2020.**
- **If in future years there are more applicants, we can increase number of awards up to 7.**

# CINP 2019–20 Accomplishments



## 2020 CINP Undergraduate Research Scholarships

Student	Supervisor	Project Title
Kiera Augusto (Winnipeg)	Jeff Martin (Winnipeg)	Cryogenics of a new neutron source
Trang Bui (Manitoba)	Wouter Deconinck (Manitoba)	Simulation of trapped protons from neutron beta decay from the BL3 neutron lifetime measurement at NIST
Spencer Keller (Mt Allison)	Mohammad Ahmady (Mt Allison)	Proper light meson spin structure in light-front holography QCD
Kaitlyn Liang (Toronto)	Makoto Fujiwara (TRIUMF)	Commissioning of ALPHA-g Radial TPC (delayed until fall)
Emily Rettich (Fraser Valley)	Derek Harnett (Fraser Valley)	Decay rates of the lightest $1^{-+}$ hybrid from QCD Sum Rules

- 9 applications were received.
- Selection Committee: Alexandros Gezerlis (Guelph), Chris Ruiz (TRIUMF), GH (Exec Dir)

# CINP 2019–20 Accomplishments



- **Successful programs to assist students in presenting their Nuclear Physics research at domestic conferences**
- **Canadian Undergraduate Physics Conference (CUPC)**
  - McGill Univ., Montreal, QC: 7-10 Nov 2019
  - Selection Committee: Juliette Mammei (Manitoba), Gwen Grinyer (Regina), GH (Exec Dir)
  - 5 applications received. Top 4 received \$600 each
- **Winter Nuclear and Particle Physics Conference (WNPPC)**
  - Banff, AB: 13-16 Feb 2019
  - Selection Committee: Juliette Mammei (Manitoba), Jeff Martin (Winnipeg), Barry Davids (TRIUMF)
  - 11 applications received. Top 7 received \$600 each.

# CINP 2019–20 Accomplishments



## Junior Scientist Travel Support Program



- 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 categories:

- 1. EDUCATIONAL AWARD:** Allows 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. DISSEMINATION AWARD:** Enables 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.



# CINP 2019–20 Accomplishments



## Recent J.Sci. Awards

Student/PDF	Supervisor	Project Title
J. Zarling (Regina)	Z. Papandreou (Regina)	<b>EDUCATION</b> – Joint GlueX/PANDA/EIC Machine Learning Workshop, Darmstadt, Germany (\$2k) DELAYED
J. Refsgaard (Saint Mary's)	R. Kanungo (Saint Mary's)	<b>EDUCATION</b> – R–Matrix Workshop on Methods and Applications, Ohio University, USA (\$1.85k) DELAYED
Shuzhie Shi (McGill)	Charles Gale (McGill)	<b>DISSEMINATION</b> – Ultra–Relativistic Nucleus–Collisions (Quark Matter 2019), Wuhan, China (\$1k)
Ahmed Foda (Regina)	Z, Papandreou (Regina)	<b>EDUCATION</b> – INFN School of Statistics, Palermo, Italy (\$2k)
Stephen Kay (Regina)	Garth Huber (Regina)	<b>DISSEMINATION</b> – Photoproduction of $d^*(2380)$ Dibaryon, Hadronic Physics Workshop, Denver, CO (\$1k)

- **Apply any time. Total Program Funds still available for FY20: \$4k**
- Selection Committee: GH (Exec Dir), J. Mammei (Education SWG), Board Member

# CINP role in 2022–26 Long Range Plan



- **CINP and IPP are tasked to consult with their respective communities, and prepare Briefs to the LRP Committee, following a fair and rigorous process.**
  - The CINP Brief must summarize the scientific vision and priorities of the Canadian nuclear physics research community, including both experimental and theoretical facets.
- **The CINP Brief writing committee consists of the five SWG Chairs with the Executive Director as lead editor.**
  - After input is received, Brief writing committee will meet in person at TRIUMF in August to finalize the Brief and our recommendations.
  - CINP Executive Director is also an ex-officio (non-voting) member of and resource to the LRP Committee.
- **32 Notices to Submit Briefs received**
- **CINP Virtual Town Hall Meeting: June 22-23**
- **Final version of Briefs due: July 10**

# CINP 2019–20 Accomplishments



## NSERC MRS Grant Renewal (2020–25)

- **SAPES comments on CINP grant application were very positive**
- **Excellence of Researcher: Very Strong**
  - "The importance and impact of the resource is clearly evident"
- **Merit of the Proposal: Very Strong**
  - "The resource is unique in promoting excellence in nuclear research and education... The Evaluation Section acknowledges the effective and transparent management of the resource"
- **Training of Highly Qualified Personnel: Very Strong**
  - "The Evaluation Section noted the variety of support the resource provides to the training of HQP, in particular the support for undergraduate students, which is expected to attract students to the field of nuclear physics"
- **Need for Funds: Very Strong**
  - "The Evaluation Section encourages the applicants to use part of the increased budget, compared to previous years, to foster their efforts related to aspects of EDI; for example, a form of targeted scholarships could be provided"
- **Funds Awarded:**
  - **FY20-21: \$85k (includes \$10k for LRP) FY21-22: \$75k**
  - **FY22-23: \$75k FY23-24: \$75k FY24-25: \$75k**
  - **Our previous grant averaged \$45.2k, an increase of 70%**

# CINP NSERC Expenditures

– Prepared by Greg Hackman



FY19 (actual)	
FY18 Carry Forward	10,563
FY19 Installment	48,000
<b>Representation Travel</b>	
ACOT (2 trips)	2,787
SAP Large Projects Day	1,425
Other domestic	649
International	2,077
<b>Conference Sponsorship</b>	2,550
<b>Undergrad Scholarships</b>	20,000
URS Travel Supplement	1,904
<b>Recruitment</b>	1,750
<b>Student Conf Support</b>	
CUPC 2019	2,245
WNPPC 2020	4,200
<b>Junior Scientist Travel</b>	5,850
<b>Misc</b>	897
<b>FY19 Expenses</b>	<b>46,335</b>

FY20 (budgeted)	
FY20 Installment	85,000
<b>Representation Travel</b>	
ACOT (1 trip)	1,350
SAP Large Projects Day	1,350
Other domestic	1,350
International	5,000
<b>Long Range Plan</b>	18,750
<b>Conference Sponsorship (delays)</b>	4,000
<b>Undergrad Scholarships</b>	25,000
URS Travel Supplement	2,600
<b>Recruitment</b>	1,750
<b>Student Conf Support</b>	7,200
<b>Junior Scientist Travel</b>	4,000
<b>Misc</b>	1,080
<b>FY20 Total</b>	<b>73,430</b>

# CINP Private Account

– Prepared by Greg Hackman



FY19 (actual)	
FY18 Carry forward	\$47,572
FY19 Dues assessed	\$21,000
Receivables (dues owed)	(\$1,500)
Executive Director	\$23,500
Finance Expenses	
Bank	\$369
Industry Canada	\$0
<b>Total FY19 Expenses</b>	<b>\$23,869</b>
<b>Year End Balance</b>	<b>\$43,203</b>

FY20 (budgeted)	
FY20 Dues assessed	\$22,000
Receivables (dues paid)	\$1,500
Executive Director	\$24,000
Finance Expenses	
Bank	\$100
Industry Canada	\$20
Financial Review (2015-2020)	\$14,700
<b>Total FY20 Expenses</b>	<b>\$40,930</b>

- Upon advice of Shirley Reece (formerly of TRIUMF) we are getting caught up on backlog of legally–required CRA filings. CPA: Dudley & Company LLP, Regina.
- Financial reviews for FY15, FY16 have been completed and are posted on CINP website. Reviews for FY17, FY18 to be done later this summer, followed by FY19 audit.

# Agenda Items

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## 4. SAP MRS Resources (10)

- **Fabrice Retiere**

## 5. Comments & Suggestions (10)

- **IDEAS FOR FY21 AND BEYOND:**

“The Evaluation Section encourages the applicants to use part of the increased budget, compared to previous years, to foster their efforts related to aspects of EDI; for example, a form of targeted scholarships could be provided”

## 6. Adjourn to Virtual DNP Business Meeting