



Advancing Equity, Diversity, Inclusion, and Indigenization (EDII) in Astroparticle Physics

Winter Nuclear and Particle Physics
Conference (WNPPC)
February 16, 2024

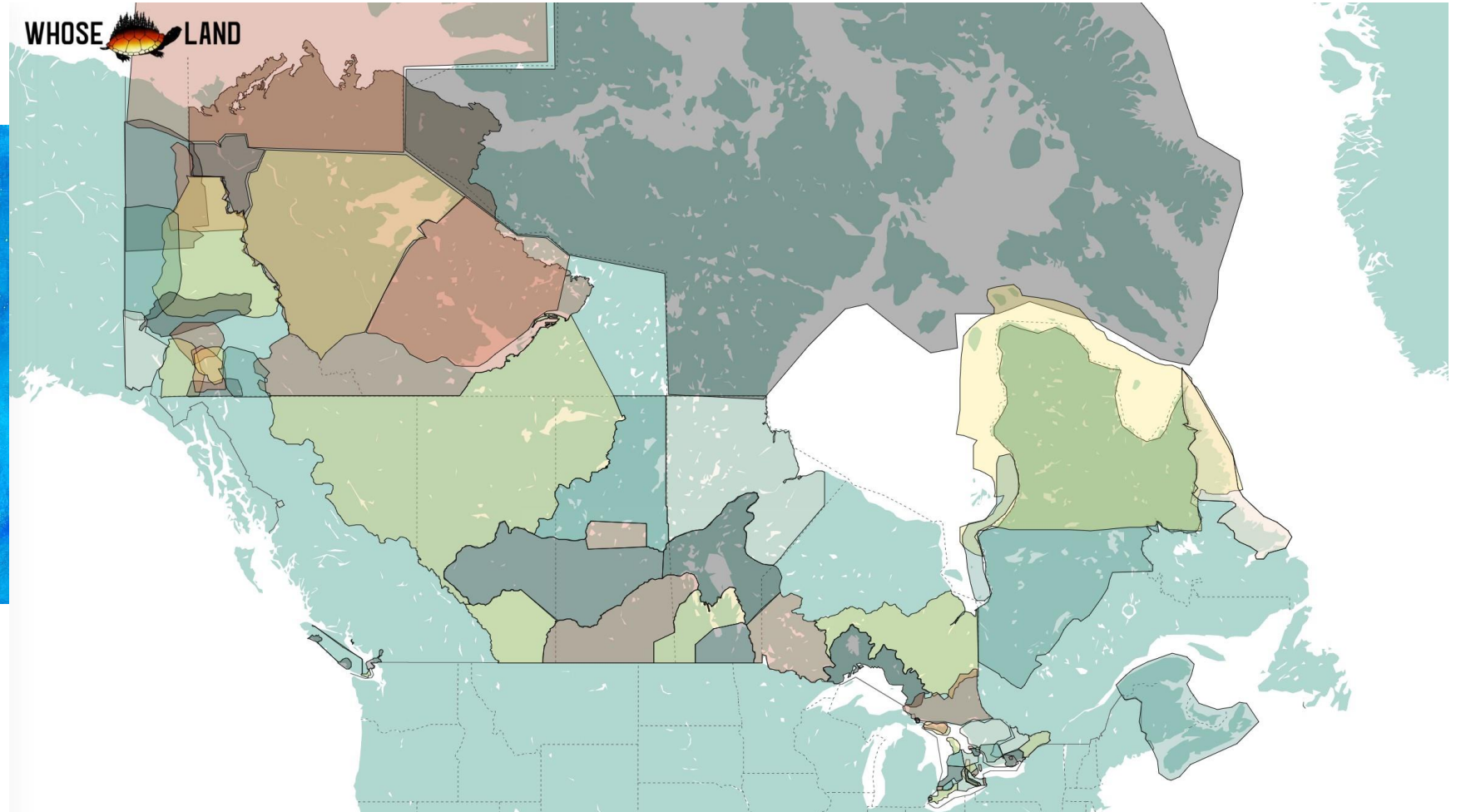
Arthur B. McDonald
Canadian Astroparticle Physics Research Institute



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"Sister's Love Walk" by Artist Theresa Brant



The McDonald Institute at Queen's University is situated in the traditional territory of the Anishinaabe & Haudenosaunee First Nations. The Institute is part of a national network of institutions and research centres, which operate in other traditional Indigenous territories. Visit www.whose.land to learn the traditional territories where astroparticle physicists are grateful to live and work across Canada.

Diversity Within the McDonald Institute Network (2023 Census Data)

McDonald Institute members:

- Come from **41 different countries** of origin.
- **32% speak more than two languages**; 40% speak English; 27% are bilingual English/French.
- **44% of members are the first** in their family to attend graduate studies; whereas only 18% are first in their family to attend post-secondary.



7%
Identify as a person
with a disability
(visible or invisible)

23%
Identify as women

11%
Identify as a sexual
minorities
(2SLGBTQ+)

30%
Identify as non-white

Indigenous and other
gender minority
respondents are below
5% participation,
respectively.

A Reminder of the McDonald Institute's Strategic Priorities Related to EDII:

Objective 4: Benefit Society and the Economy

*"Develop opportunities for the international community to see the Canadian landscape as ready to excel in future international astroparticle research and **lead equity and inclusion efforts to increase the diversity of the astroparticle physics community.**"*

Objective 5: Champion Diversity, Management and Governance

"... In our efforts to achieve international excellence in the research, it is our duty to contribute to solutions to EDI problems in astroparticle physics and physics in general."

Manager for EDII Capacity Development Appointment

Priorities

- Operationalize a budget that advances EDII potential and action across the network.
- Travel to partner organizations to (re)establish and review EDII collaboration goals and community vision (i.e., SNOLAB, Perimeter Institute). Further travel planned for 2024.
- Further existing and new EDII partnerships locally (Indigenous Futures in Engineering, Women in Engineering, Human Rights and Equity Office) and nationally (Atlantic Chairs in EDI, Lifelong Learning Institute, IBET program).
- Review and revise EDII policies in day-to-day operations and programs at the McDonald Institute.
- Launch and further DEAP Tool for Researchers program in partnership with HREO.
- Respond and support Astroparticle Physics Community.
- Communicate EDII objectives and opportunities within the community.

Manager for EDII Capacity Development Appointment

Invited EDII Presenter at:

- PICO Collaboration Meeting (May).
- Vice Principal (Research) Faculty Retreat on EDI in Action Planning (May).
- nEXO Collaboration Meeting (June).
- Women in Physics Canada (WiPC) (July, Winnipeg, MB).
- CASST (undergraduate summer student talk competition) (August, SNOLAB/Laurentian, ON).
- McDonald Institute Annual National Meeting (August).

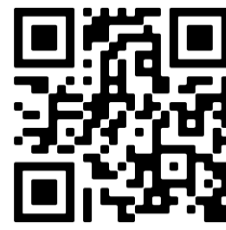
Conference participant and McDonald Institute EDII Representative at:

- CAP Conference (June).
- CUPC (October)
- CCUWiP (January)

Projects Underway:

- Proposal to host the 2025 Women in Physics Conference at Queen's (submitted Nov. 2023).
- Indigenous Engineering Physics Comic Book (in final edits).
- IBET Program (ongoing) **with revisit in 2024.
- Partnership development with Imotep's Legacy Academy, Lifelong Learning Centre (Black Excellence in STEM).
- Menstrual Equity Program in Stirling Hall (launching Winter 2024).

McDonald Institute EDII Website Presence and Vision



Arthur B. McDonald
Canadian Astroparticle Physics Research Institute

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[Equity, Diversity, Inclusion, and Indigenization \(EDII\)](#)

[DEAP Tool for Researchers](#)

Where have we been...

It is documented that the **Canadian physics community has performed below the STEM average** for equitable, diverse, and inclusive recruiting, retention, promotion, and operational processes (**CanPhysCounts 2021**; with additional U.S. context from: **Merner and Tyler, 2017**; **Multimessenger Diversity Network et al. 2020**; **Porter and Ivie, 2019**; **National Center for Science and Engineering Statistics Directorate for Social, Behavioral and Economic Sciences, 2018**).

External and internal systemic barriers, and biases (conscious and/or unconscious) limited recruitment, participation, retention, and promotion of individuals from equity deserving groups. But, physics is changing...



Present:

- Website features past, present, and future actions towards increasing EDII
- Link to the DEAP Tool for Researchers
- Link to the Advancing EDII Fund

Future Updates for Website:

- Resource Centre (professional development modules, EDI physics resources and community of practice)
- Links to partners (i.e., Q-AISES Rocket Team, Indigenous Futures in STEM, Atlantic Chairs in EDI, etc.)

DEAP Tool for Researchers Website Presence



Features:

- A self-assessment for faculty on the EDII journey.
- Fourteen indicators as areas for EDII improvement.
- Goal setting for the academic year, with check-ins and support with EDII advisors.
- Downloadable pdf versions for print and web.
- Link to Manager for EDII Capacity Development.

The Diversity and Equity Assessment Planning (DEAP) Tool for Researchers

The DEAP Tool for Researchers was co-developed by the Human Rights and Equity Office at Queen's University and the McDonald Institute. This Tool is intended for faculty and research scientists to use in their labs or research group spaces to expand their capacity for EDII growth.

The DEAP Tool for Researchers is a living document that will be updated to reflect user experiences as well as an evolving EDII landscape.

[Learn more about the DEAP Tool for Researchers here:](#) ▶



20 unique researchers from physics, chemistry, geosciences, and medicine have downloaded the Tool since the website's launch (Nov).

The Advancing EDII Fund for Astroparticle Physics



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[Equity, Diversity, Inclusion, and Indigenization \(EDII\)](#) [DEAP Tool for Researchers](#)

Stream 1 (up to \$1,000 CAD) – Seed funding for new initiatives that enhance EDII capacity in research labs, groups, and departments for starting novel programs, training opportunities, activities, or events.

Stream 2 (up to \$2,500 CAD) – Support funding for existing initiatives that advance EDII in the field for initiatives, programs, or events.

Stream 3 (up to \$2,500 CAD) – Support funding for faculty members* who are actively working towards goals using the DEAP Tool for Researchers (or an equivalent equity-based assessment tool).



The Advancing EDII Fund for Astroparticle Physics

The Advancing EDII Fund for Astroparticle Physics aims to financially support community building and strengthening efforts in physics training and research environments across Canada.

[Click here to learn more about this funding opportunity:](#)

Students, postdocs, faculty and staff supporting astroparticle research training and research environments in Canada are eligible to apply.



Thank you

Please feel free to contact me at:
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