

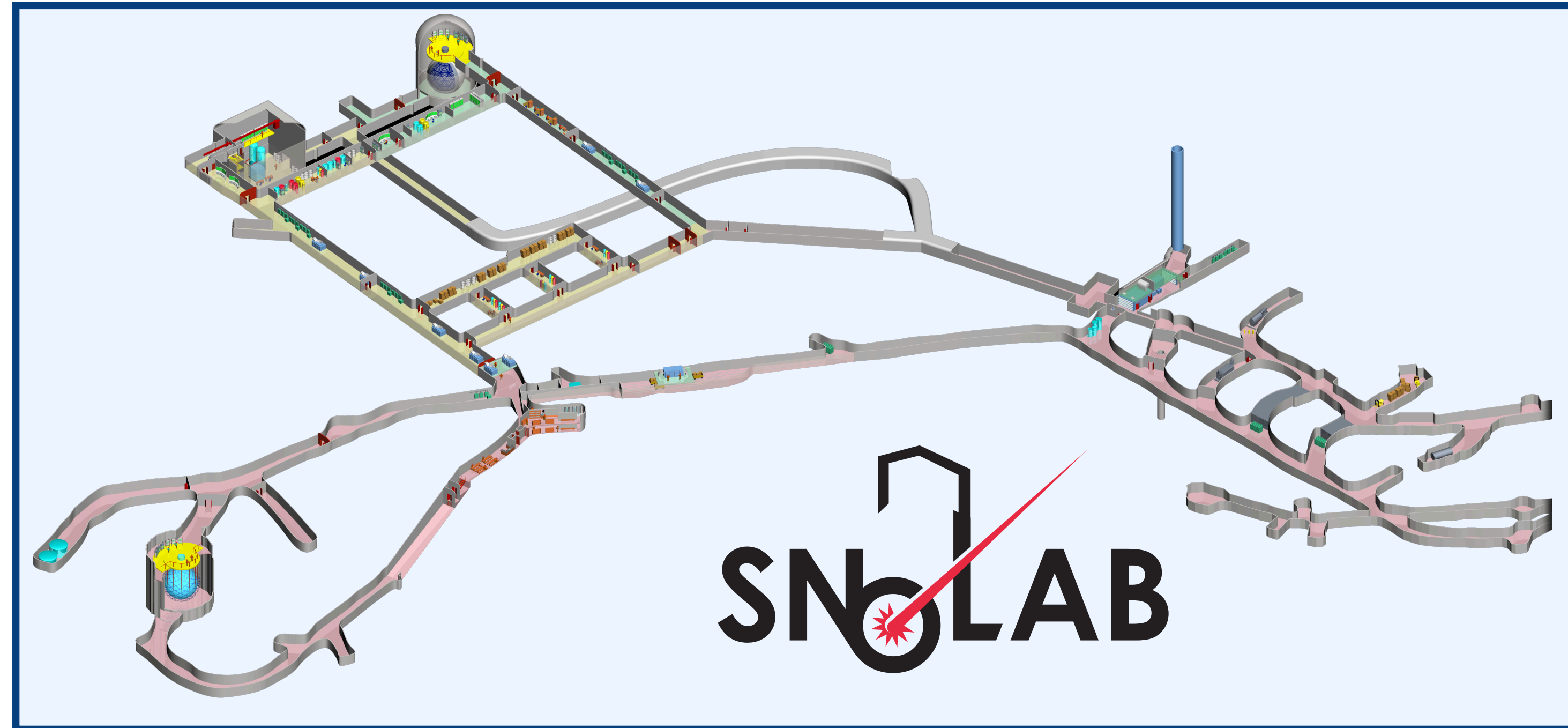
Enhancing Equity, Diversity, & Inclusion in Physics: Perspectives from SNOLAB



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Frontiers in Physics, Science And Technology
In Deep Underground Laboratories

Within the field of astroparticle physics, SNOLAB plays a significant role hosting many experiments run by large collaborations of scientists. SNOLAB effects change in these groups as well as its own workforce through coordinated efforts in outreach, leadership, experimental policies, and improving its unique underground environment.



Equity: Everyone has access to the same opportunities to grow, thrive, and do their best work. Advantages and barriers exist for some groups, and we do not all start from the same place.

Diversity: All the ways individuals or groups are uniquely different from one another. We embrace a broader definition of diversity that not only includes race, ethnicity, and gender but also age, national origin, religion, disability, sexual orientation, socioeconomic status, education, marital status, language, and other factors that influence our ideas, values, perspectives, and experiences.

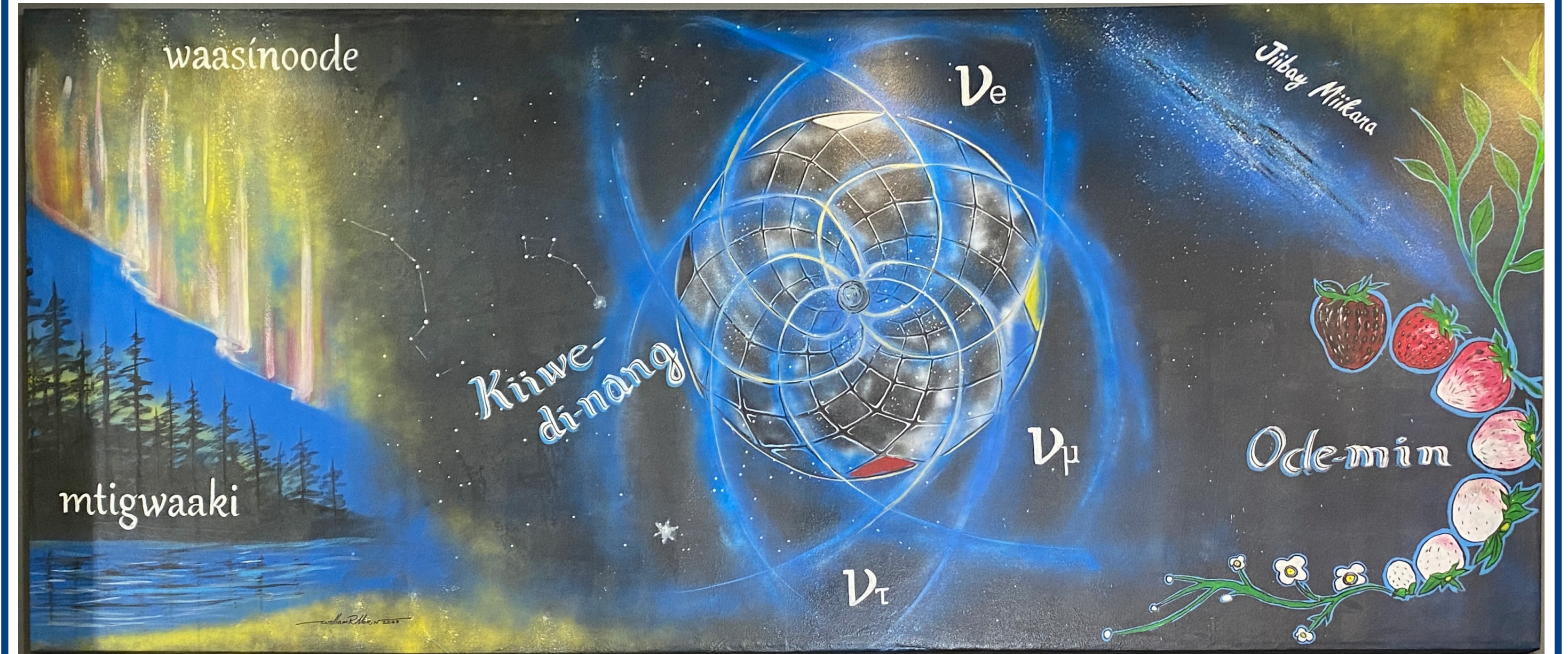
Inclusion: Fostered by creating an environment where any individual or group feels welcomed, respected, valued, and empowered to not only fully participate but also to succeed. We are committed to creating a workplace that respects and embraces the differences of every member of our team.



SNOLAB is working to improve EDI in Canada by targeting different aspects of the research environment.

Murals

In 2023, SNOLAB invited local Indigenous artists to create murals on site.



"Agaashiinyi: It is Small" by William Morin (above) interweaves Indigenous and western knowledge into a cohesive and inspiring work explaining astronomy and particle physics.

"Star Stories" by Mishiikenh Kwe (below) depicts a fusion of traditional stories that were told by her grandmother. These show unity of the natural world around us.



Underground Facility

SNOLAB operates its entire 5,000 m² underground facility as a Class-2000 clean room inside an active mine site. This obligates different requirements than other underground facilities might have in terms of the preparation that staff and users undergo to access the lab space. All persons entering SNOLAB underground must have a shower, to remove any dust from the travel through the mine drift. Currently the showering facilities are gendered; SNOLAB supports all staff and users to choose the change room they feel most comfortable in. There are plans to renovate the underground space to include a universal shower, for accommodating those who might not feel comfortable showering in a gendered space. This shower already exists in the surface building after recent renovations.



SNOLAB has installed a mobile quiet space for providing a prayer and reflection, outfitted with a sign indicating the direction towards Mecca (left). The washrooms underground are all "universal", meaning every one can be used by a person of any gender-identity (right).

Experiment Policies

As a host lab for large international collaborative experiments, SNOLAB encourages collaborations to have policies that enhance diversity and inclusion in their own ranks. During the initial formation of an agreement between a new scientific collaboration and the lab, each collaboration must have a formal Code of Conduct that is approved by its scientific board. The collaboration should either dedicate a Policy or written statement regarding Equity, Diversity, and Inclusivity.

As the conceptual and technical designs of an experiment advance, so too should the plans for increasing EDI within the experimental collaboration. Collaborations are each unique, and the EDI plan should be developed by members who understand their own group dynamics and needs. This can include any number of initiatives and will vary, depending on the size of the collaboration. Possible inclusions in the plan are shown in the table below. The plan should include measurable goals, and progress can be presented to the lab during design reviews and bi-annual experimental reviews.

EDI Committee	Newsletter	Climate Survey
Junior Board Members	Mentorship Program	Onboarding
Board Diversity	Authorship Policy	EDI Lessons Learned
EDI Lectures and Workshops	Distribution of Conference Talks	Accommodation Security

SNOLAB EDI Action Plan:

