Innovation,
Diversity
Exploration &
Advancement in
STEM



The IDEAS Initiative

Melissa Baiocchi

Queen's University

Land Acknowledgement

- Respectfully, we acknowledge that UNB stands on the unceded, unsurrendered, traditional territory of the Wolastoqey
- The lands of Wabanaki people are recognized in a series of Peace and Friendship Treaties to establish an ongoing relationship of peace friendship and mutual respect between nations
- Whose land are you on: https://native-land.ca/

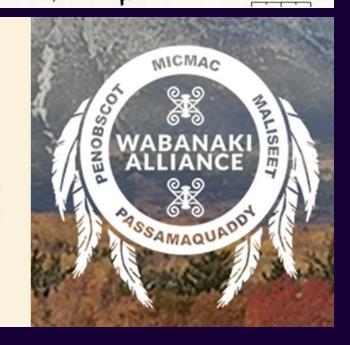
More Land Acknowledging

- Wabanaki: People of the dawnland
- This alliance of four peoples predated its first reporting by Europeans in 1606
- See https://wnnb.wolastogey.ca/history/







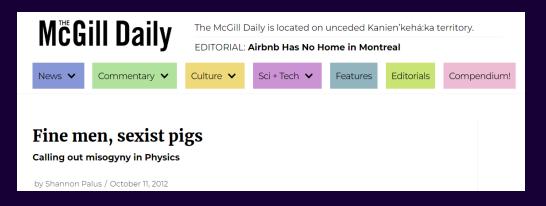


St. Lawrence

The problem

- There is a significant drop in interest girls in STEM at ages 9-13. Updated studies in this field increase the scope of the issue
- Many children love science but are unable to see themselves as scientists
- The decline in "believing you can be a scientist" begins in middle school and disproportionally affects underrepresented groups, including girls, members of some racial and ethnic minorities, and children from lower socioeconomic backgrounds.







IDEAS mission

- Addressing this issue at the root of the problem
- Promoting confidence in youth through adulthood in pursuing scientific learning and careers
- Creating a network of mentors and students across the country for under-represented minorities in science to foster connection

Timeline

(Rolling the calendar back to 2012)

Physics named most misogynistic department

Mechanical Engineering outraged

by Commentary / October 18, 2012





The McGall Physics department, which won the Golden Pig award last week, was recently named "McGall's most misogynistic department" in an independent survey. This marks the first year the award was conferred onto a department other than Mechanical Engineering since the highly chauvinistic prize was established in 1992. Reactions in the Physics department have been mixed.

"We feel greatly honoured and humbled to have received this prestigious award," Marcus Mitchel, president of the McGall Society of Physics Students (MSPS), said in an earlier phone interview. "We worked incredibly hard around the year not only to create and foster an environment hostile to women, but also to encourage the denigration and objectification of women, both inside and outside the classroom."

Some have criticized the prize committee's decision. Mario Curie, head of the McGall Association of Mechanical Engineers (MAME), said in an e-mail communication with The Twice-a-Weekly: "We are truly disappointed that the prize committee did not find us deserving of the Golden Pig this year. In Mechanical Engineering, we strive to deliver the worst possible experience to our female students. We don't think we have ever fallen short of this goal and are chasing the women out of Mech-Eng, one sassy bitch at a time."

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CANADIAN CONFERENCE FOR UNDERGRADUATE WOMEN IN PHYSICS

McGill University, January 10-12, 2014



4 Years Later

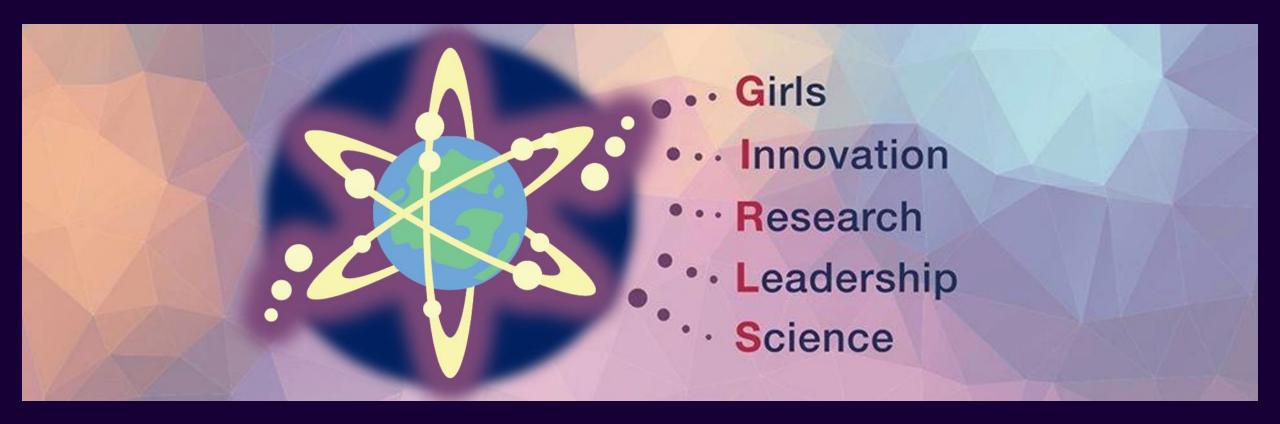
Proposal for Diversity Initiative: A Physics-based Summer Camp for Girls in Kingston v1.0







Erica Caden, Liz Fletcher, Benjamin Tam December 6, 2018



"Novel Intergenerational Approach"

GIRLS Camp

GIRLS Camp was 'out of this world'

Posted: August 19 2019

Summer Physics & Astronomy Camp for 11-13 year-old girls was volunteer-driven success.

Graduate students in Physics, Engineering Physics and Astronomy planned, promoted and ran the first Girls In Research, Leadership & Science (GIRLS) Summer Camp July 22-26. The fierce summer heat that lit Kingston paled in comparison to the blaze of activity as a flurry of girls could be seen dashing around Stirling Hall, learning and doing science. The girls, aged 11-13, spent the week participating in a series of laboratory experiments, projects, and activities that investigated some of the most elusive questions in





COVID Happened

What happened?

- The mission persisted
- Online Science Fair:
 - 45 Graduate student mentors
 - 72 Applicants
 - 38 Funded projects
- STEM Stories
- Let's Talk Astrophysics:
 - 3 Invited Speakers
 - 50 Volunteers (students & faculty)
 - Undergraduate Panel
 - 200 Workshop Attendees (Reached Capacity)







	February 20	February 21
1:00 - 1:30 pm 1:30 - 2:00 pm	Introduction	Sarah Gallagher Canadian Space Agency
	Galaxy Talk Dr. Karen Lee-Waddell	
	ICRAR & CSIRO 1:10 - 1:40	Workshop 1
	Break 1:40 - 1:55	
2:00 - 2:30 pm	Dark Matter Talk Prof. Nassim Bozorgnia YorkU 1:55 - 2:25	Break 2:00 - 2:15
2:30 - 3:00 pm	Dark Energy Talk Prof. Celia Escamilla-Rivera ICN-UNAM	Workshop 2
	Break 2:55 - 3:10	Break 2:55 - 3:10
3:00 - 3:30 pm	10000000	Workshop 3
3:30 - 4:00 pm	Panel	
	3/10 / 4/00	Closing Remarks



22/02/2021

Let's Talk Astrophysics Symposium

Let's Talk Science coordinator Simran
Nerval, IDEAS chairperson Ben Tam, and
high school student Sarah Poulin sat
down with CBC to chat Let's Talk
Astrophysics

Let's Talk Astrophysics Symposium Let's

Talk Astrophysics Symposium with master's student and theoretical cosmologist Simran Nerval and grade 11 student Sarah Poulin.

Timeline Overview

• 2019: Getting to the Right IDEA

• 2020: Covid-19 had other IDEAS

• 2021: IDEAS is Born



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What are we doing now?

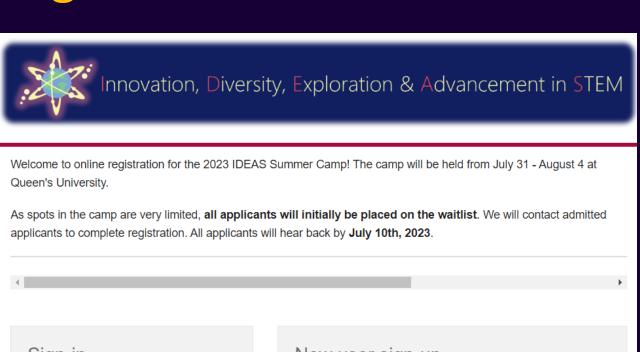
IDEAS Summer Camp 2023

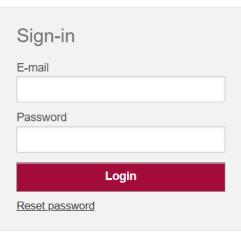
- To be held at Queen's in August 2023
- Free to attend
- Ages 11-13
- Counselor training completed at SNOLAB
- Registration is now open

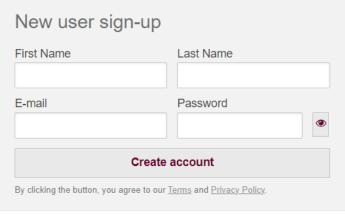
More events coming soon!



Registration for IDEAS CAMP 2023









JULY 31- AUGUST 4

The IDEAS Summer Camp is a science-themed day camp for kids aged 11-13 yrs interested in Astronomy, Physics, and learning more about the world around them!

IDEAS aims to foster community and a love for science in underrepresented groups. We highly encourage gender minority, BIPOC, and disabled students to apply.

- FREE TO ATTEND
- AGES 11 13 YRS
- 9:00 AM 4:30 PM
- AT **STIRLING HALL**,

 QUEEN'S UNIVERSITY

CONTACT: physcamp@queensu.ca

LEARN MORE:

www.queensu.ca/physics/ideas-intiative



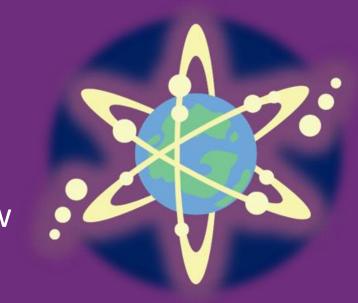
2023.4.6.2





Legacy

• It is not enough to inspire children and let them know "Anyone can love and do science!"



- We already know and believe this
- It is more meaningful to tell children who love science, that not only can they find a fulfilling life and career within the sciences, but also that they will always be welcome in the field

What's next?

Future Initiative Goals

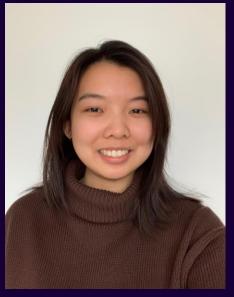
- Continue to grow the reach of the IDEAS message
- Bring back impactful events from previous years and develop new projects with current team
- Build initiative sustainability with a stronger transition structure from year to year

(We do not need to be credited to support independent initiatives with similar missions. We are happy to share our resources)

Our Team!



Melissa Baiocchi Chairperson



Minya Bai Vice Chairperson



Yilda Boukhtouchen Co-Director



Akanksha Bij Co-Director



Adele Gryba Executive Director

Connect with us!

- Come talk to me!
- Check out our website: https://www.queensu.ca/physics/ideas
- Email us at physcamp@queensu.ca
- Social Media will be active again soon

Facebook: IDEAS Initiative

Instagram: @ideas initiative

Thank You!



