Welcome to McGill Physics!

http://www.physics.mcgill.ca -> Students -> Undergraduate studies

TODAY:

- Introductions
- Advising
- Where to find info
- Library Services
- Meet MSPS
- Main programs
- Electives, minors

- Research!
- Navigating the department
- Getting involved
- Why Physics?

- **Ask your questions!**

PHYSICS DEPARTMENT VALUES

The Department of Physics shares McGill University's commitment to academic excellence, inclusion, and respect. We strive for a department in which all members feel a sense of belonging and can thrive as Physics students, instructors, researchers, and support staff.

(Values Statement 2021 – opening lines)

YOUR ADVISORS:

Dr. Kim Metera

Prof. Hong Guo

Prof. Keshav Dasgupta

Prof. Katelin Schutz

ADVISORS:

You will have a Faculty of Science advisor (SOUSA) *and* Physics advisors.

SOUSA

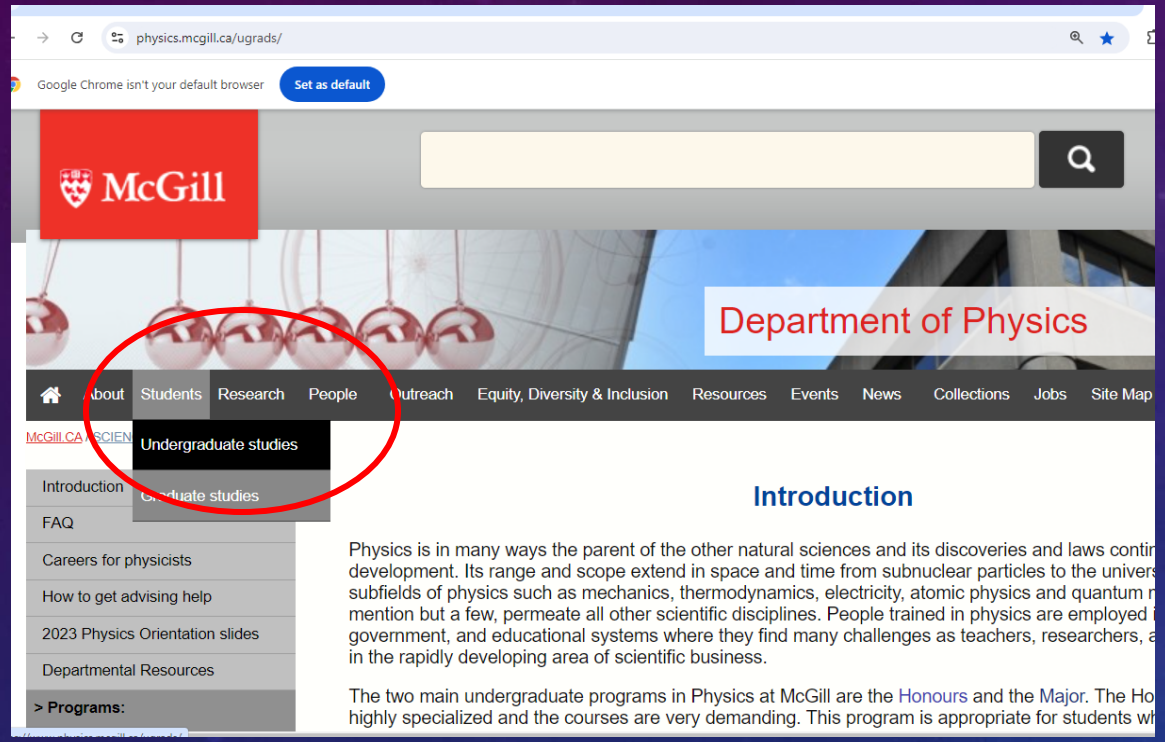
- General questions (freshman courses, study abroad, etc)
- Credit limits
- Minors, electives
- Your overall degree

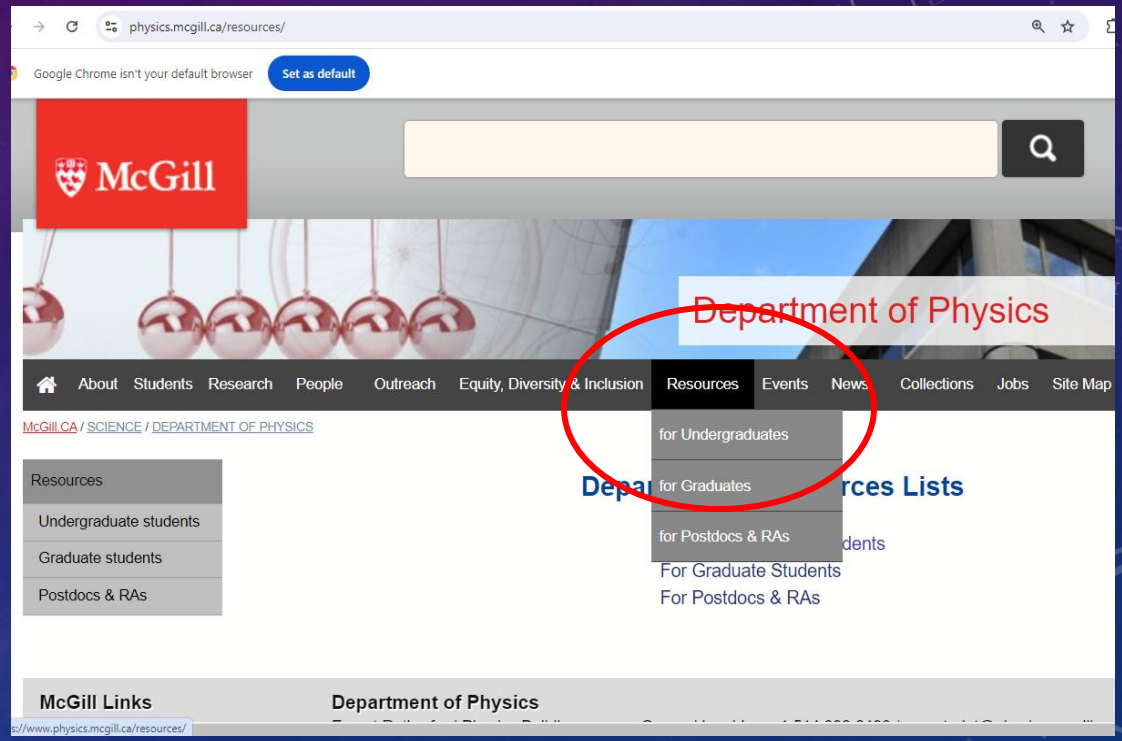
Physics

- Program requirements
- What courses to take
- Course conflicts
- Research
- Careers/grad school

OTHER PLACES TO GET HELP/INFORMATION

- Physics:
  - Undergrad website: https://www.physics.mcgill.ca/ugrads/
  - Student handbook and eCalendar
  - MSPS (McGill Society of Physics Students)
- Resources page: https://www.physics.mcgill.ca/resources/ugrads.html
- Service Point
- Advisors in other departments (for Joint programs)
- Wellness Hub


physics.mcgill.ca/ugrads/
Google Chrome isn't your default browser
Set as default
McGill
Department of Physics
About
Students
Research
People
Outreach
Equity, Diversity & Inclusion
Resources
Events
News
Collections
Jobs
Site Map
Undergraduate studies
Introduction
FAQ
Careers for physicists
How to get advising help
2023 Physics Orientation slides
Departmental Resources
> Programs:
Introduction
Physics is in many ways the parent of the other natural sciences and its discoveries and laws contin
development. Its range and scope extend in space and time from subnuclear particles to the univers
subfields of physics such as mechanics, thermodynamics, electricity, atomic physics and quantum
mention but a few, permeate all other scientific disciplines. People trained in physics are employed
government, and educational systems where they find many challenges as teachers, researchers,
in the rapidly developing area of scientific business.
The two main undergraduate programs in Physics at McGill are the Honours and the Major. The Ho
highly specialized and the courses are very demanding. This program is appropriate for students w


physics.mcgill.ca/resources/
Google Chrome isn't your default browser
Set as default
McGill
Department of Physics
About
Students
Research
People
Outreach
Equity, Diversity & Inclusion
Resources
Events
News
Collections
Jobs
Site Map
for Undergraduates
for Graduates
for Postdocs & RAs
Resources
Undergraduate students
Graduate students
Postdocs & RAs
For Graduate Students
For Postdocs & RAs
McGill Links
Department of Physics

Welcome

Bienvenue

McGill Libraries Orientation

April Colosimo, Liaison Librarian
McGill University Libraries
2024

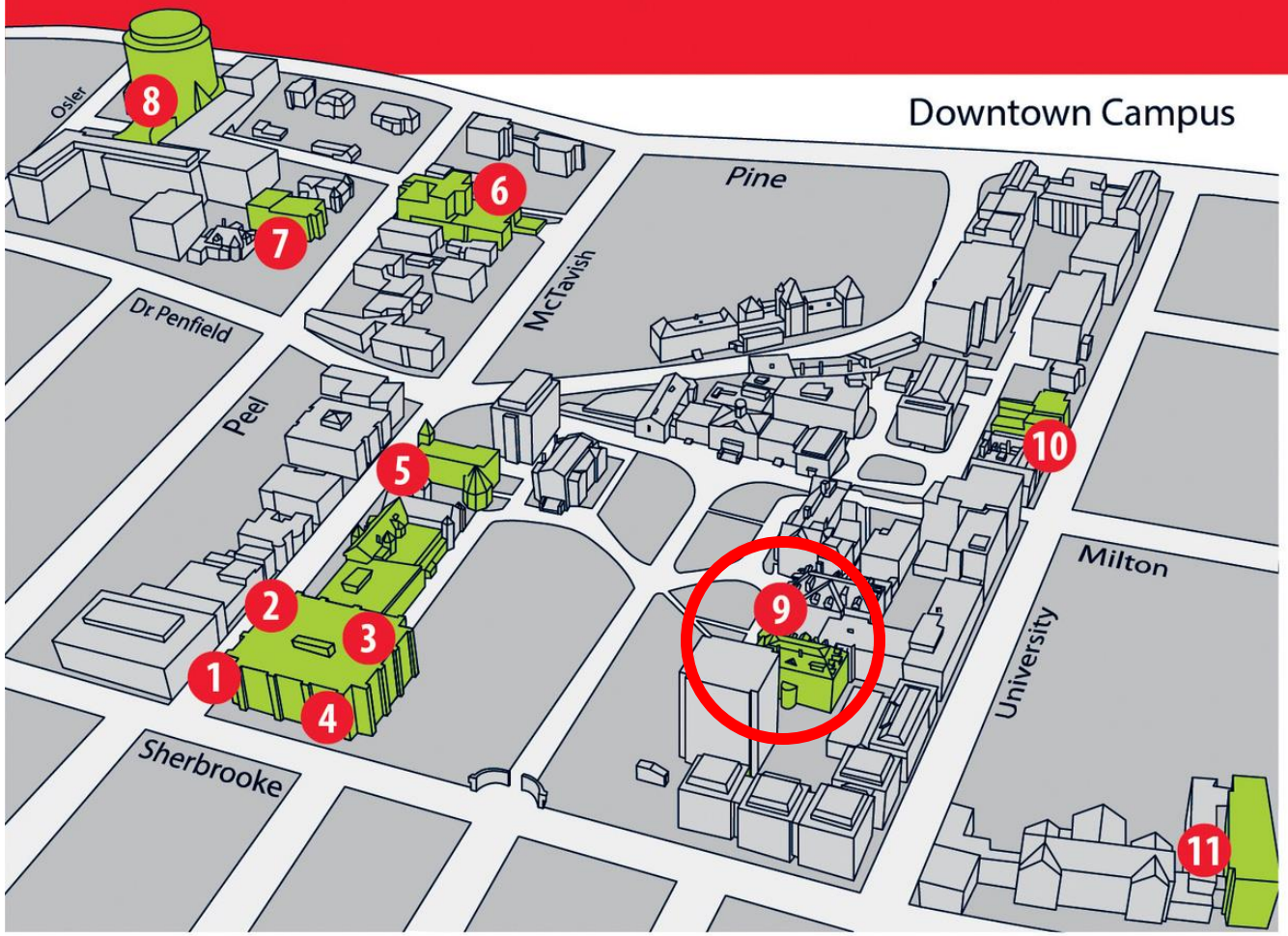
April Colosimo

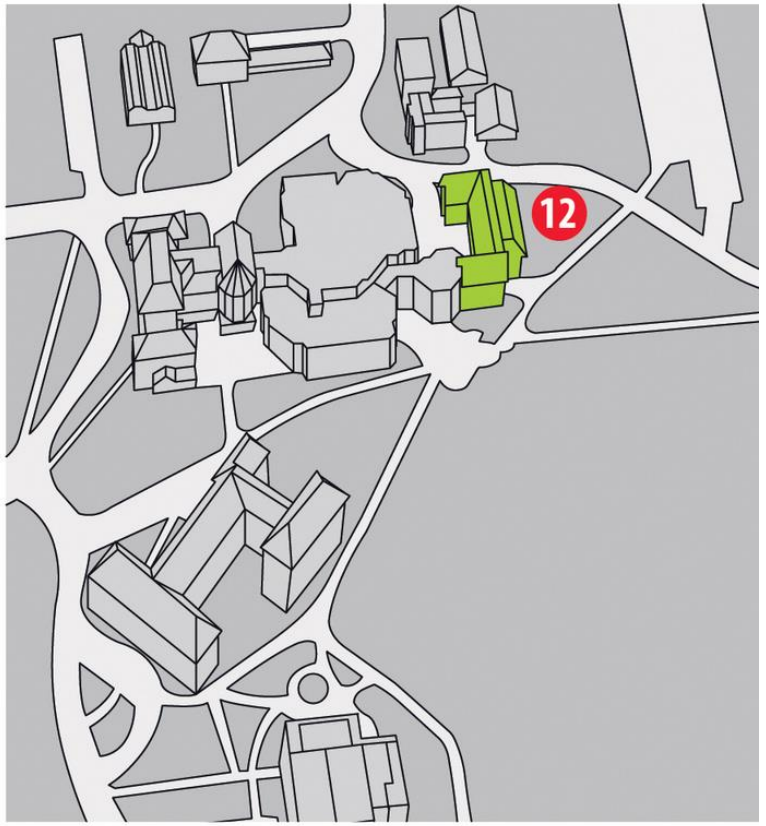
- **Liaison Librarian** at the Schulich Library

- **I can help you**
  - Use the library's collections, services, and spaces.
  - Search for research literature.
  - Manage and cite references.
  - Answer questions related to copyright, scholarly communications and more.

email: april.colosimo@mcgill.ca

Library Branch Map





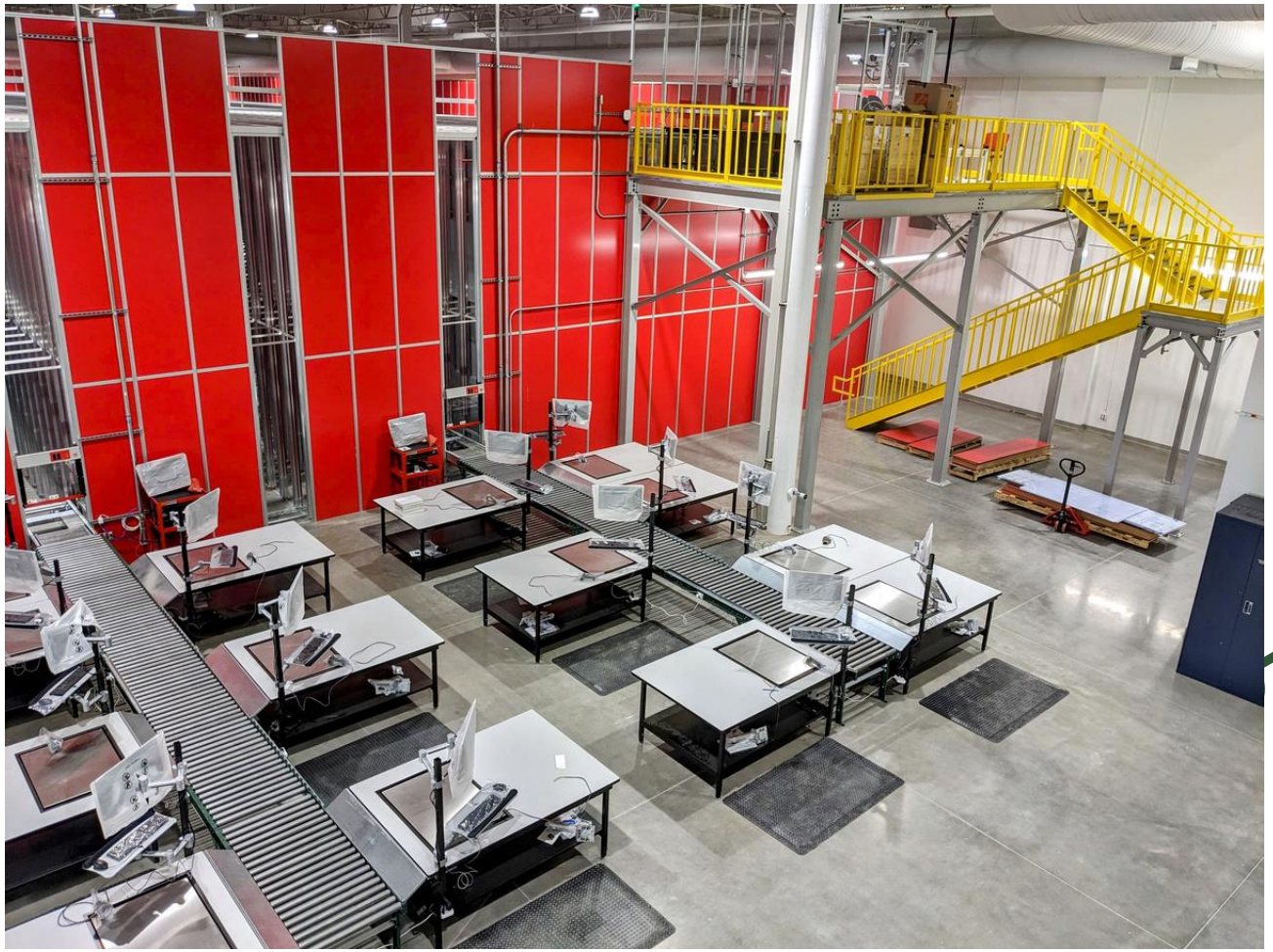
1	Humanities & Social Sciences Library	McLennan-Redpath Complex | 514-398-4734
2	Rare Books & Special Collections	McLennan Library Bldg, 4th flr | 514-398-4711
3	McGill University Archives	McLennan Library Bldg, 4th flr | 514-398-4711
4	Visual Arts Collection	McLennan Library Bldg, 4th flr | 514-398-1859
5	Islamic Studies Library	Morrice Hall | 514-398-3662
6	Education Curriculum Resources Centre	Education Bldg, 1st flr | 514-398-5726
7	Nahum Gelber Law Library	3660 Peel St | 514-398-4715
8	Osler Library of the History of Medicine	McIntyre Medical Bldg, 3rd flr | 514-398-4475 ext. 09873
9	Schulich Library of Physical Sciences, Life Sciences, and Engineering	Macdonald-Stewart Library Bldg | 514-398-4769
10	Birks Reading Room	William and Henry Birks Bldg, 2nd flr | 514-398-4127
11	Marvin Duchow Music Library	Elizabeth Wirth Music Bldg, 3rd flr | 514-398-4695
12	Macdonald Campus Library	Barton Bldg, 2nd flr | 514-398-7881

Schulich Library

- Over 800 seats.
- Mix of quiet and group study space.
- 3D printer service.

Check the website for opening hours, which change throughout the semester!

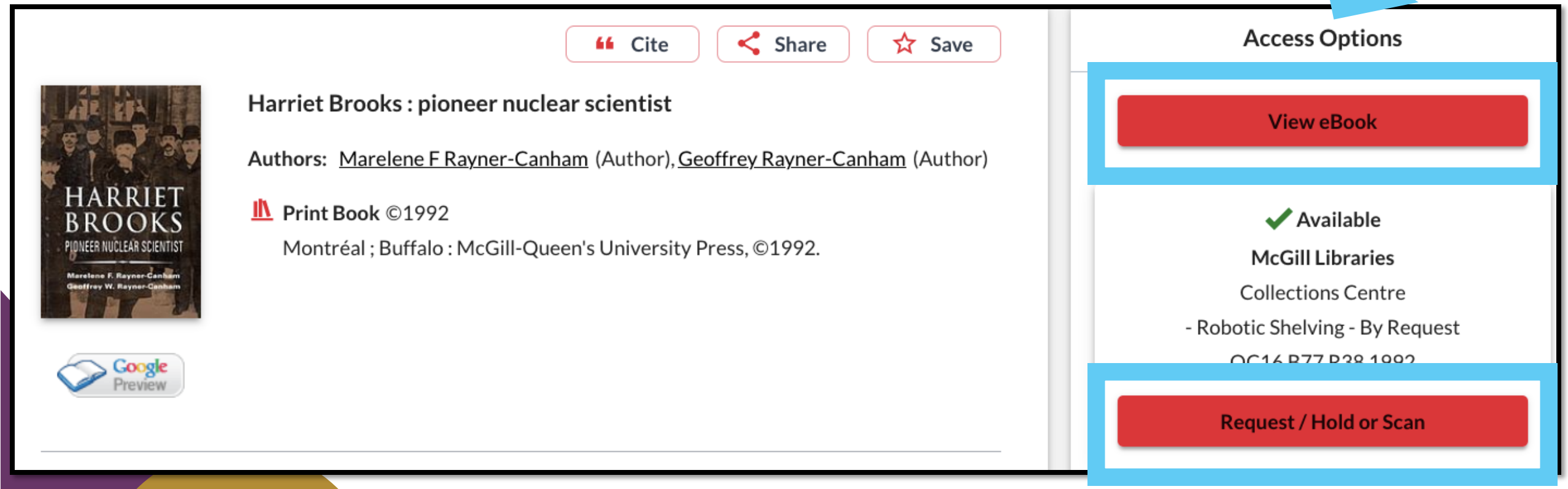
McGill University Collections Centre



Watch a video!

Learn more here!

Access Options



libraryguides.mcgill.ca/physics

- Support for your research
  - Finding books
  - Finding articles
  - Finding patents
  - Finding theses and dissertations
  - Access to full text
  - Data management
- Reading and evaluating sources
- Writing and citing
- Getting your research out
- Tracking research
- Learning online
- History of physics
  - Spotlight: Women in Physics

Welcome to the physics guide

Orientation:

- Presentations: Undergraduate presentation (PDF) and graduate presentation (PDF)
- McGill Libraries orientation page, which includes the Welcome Handbook
- Tours of Schulich Library:
  - August 23, 12pm (45 min)
  - August 28, 3pm (45 min)
  - September 4, 10:30am (45 min)

On this guide you will find resources to support your research and writing, as well as things to consider when getting your research out and tips for tracking research and keeping up-to-date. Contact me for help of any kind, or to make suggestions to improve this guide.

Support for your research includes:

- Finding books
- Finding articles

April Colosimo

she/her

Email me

Schedule an appointment

INTRODUCING: MSPS

PHYSICS PROGRAMS:

Majors Physics:

- Good prep for grad school
- Research opportunities
- Fewer physics credits
- More flexible (electives, minor)

Honours Physics:

Can start in U1

- Good prep for grad school
- Requires some research
- More physics credits
- Easier access to higher-level physics courses
- Need to have a GPA=3.0.

Joint programs:

- Math
- Computer Science
- Chemistry
- Atmospheric Sciences
- Geophysics
- Physiology

IT'S ABOUT FINDING THE PROGRAM THAT'S RIGHT FOR YOU!

- Honours:
  - Some courses lean a bit more theoretical,
  - but there are honours students who are excellent experimentalists!
  - Little room for other subjects
- Majors:
  - Some courses lean a bit more applied
  - Room to do a minor or take more electives

- Joint programs: Physics + other subject
  - Less physics than a Physics Major, more of something else.

MINORS

- You do not have to do a minor (exception= Physics Liberal)
- 18-24 credits (6-8 courses)
- May need to consider early, plan for prerequisites
- Minor advisor = advisor in that department

- Hard to fit into honours physics programs
- Possible with majors physics programs

ELECTIVES

- Can be more math, comp sci, or physics, or...
- Can be anything in Arts or Sciences
- Balance out your workload
- Switch focus

- When choosing:
  1) Fits well into your schedule
  2) Interesting
  3) Manageable difficulty

RESEARCH!

- For grad school/job applications – reference letters
- But also for you!
  - Do you like research?
  - What kind of research do you like, or don't like?
  - Learn things not taught in class
  - Meet people

- Summer ($) - optional, also access to the Summer Undergrad Program
- During the year (credit) - all programs (optional or required)
- Can start after U1

NAVIGATING THE DEPARTMENT/BEING AN UNDERGRAD

SENDING EMAILS:

How to write and email

(and how not to write one)

(to profs, TAs, SOUSA, advisors, etc.)

DO NOT SEND EMAILS LIKE THIS:

(To a professor)

Hey Mike,

I need to get an A in your class. Please give me more points.

Also, I won't be at the final exam because I already bought my plane tickets home.

Thanks,

First Name

DO NOT SEND EMAILS LIKE THIS:

Too informal

Not a reasonable request, no explanation

Hey Mike,

I need to get an A in your class. Please give me more points.

Also, I won't be at the final exam because I already bought my plane tickets home.

Thanks,

Who?

First Name

SEND EMAILS LIKE THIS (FROM MCGILL EMAIL ADDRESS)

Respectful

Dear Professor Last-name,

Specifics, includes what you've already tried or looked into

Context

I'm in your Class Name, Section Number that meets on ThisDay. This is the question I have or the help I need. I've looked in the syllabus and at my notes from class and online and asked someone else from the class, and I think This Is The Answer, but I'm not sure. This is the action I would like you to take.

Thank you,

Your Name

Student ID number

Oh that person! And the prof can look you up more easily if needed

OFFICE HOURS AND TUTORIALS

- Profs and TAs
- Sometimes it's easier to talk through a question or problem in person
- Be prepared to explain what you've tried already in terms of solving your problem

- Getting help from TAs and profs is OK

WANT TO GET INVOLVED AND MEET PEOPLE?

- MSPS
- Physics Outreach
- EDI (Equity, Diversity, Inclusion)
- Social events throughout the year

- A zillion McGill clubs and associations (https://ssmu.ca/student-life/clubs-services-isg/)
  (I googled "McGill clubs")

GENERAL ADVICE

- Try stuff!
  - Labs, a weird elective, etc.
- Science is not a solo endeavor.
  - Learn from friends
  - Ask for help from TAs and profs, advisors and other sources
- Getting good at stuff is a process -> mistakes are OK and no one is perfect
- If your interests change, it can be OK to pivot (check with an advisor)

WHAT CAN I DO WITH A PHYSICS DEGREE?

Fields:

- AI
- Medicine, medical/health research, medical physics
- Robotics
- Software engineering/development
- Aerospace engineering
- Astronomy
- Education, science communication
- Quantum computing
- Data science
- Finance
- Law
- MBA, entrepreneurship
- *Tons* of other things!

Grad Schools:

- McGill
- UofT
- UBC
- MIT
- Harvard
- Princeton
- Johns Hopkins
- CalTech
- Stanford
- Max Planck Institute
- ETH Zurich
- Many others worldwide

Sectors:

- Academia
- Industry
- Government

THANK YOU, AND WELCOME TO PHYSICS!

QUESTIONS? - PLEASE ASK THEM