

Would you like to image myelin in the human brain?

Find out how - Pursue a degree in the
Department of Physics & Astronomy

Beyond First Year Open House

Date: Thursday, March 30th, 2017

Time: 12:40 - 13:45

Location: HENNINGS 202

Join us for free sandwiches!

UBC DEPARTMENT OF
PHYSICS & ASTRONOMY

Generate electricity by mimicking photosynthesis?

Find out how - Pursue a degree in the
Department of Physics & Astronomy

Beyond First Year Open House

Date: Thursday, March 30th, 2017

Time: 12:40 - 13:45

Location: HENNINGS 202

Join us for free sandwiches!

U B C D E P A R T M E N T O F
P H Y S I C S A S T R O N O M Y

How do you build a quantum computer?

Find out - Pursue a degree in the
Department of Physics & Astronomy

Beyond First Year Open House

Date: Thursday, March 30th, 2017

Time: 12:40 - 13:45

Location: HENNINGS 202

Join us for free sandwiches!

UBC DEPARTMENT OF
PHYSICS) ASTRONOMY

Would you like to discover Earth-like exoplanets?

Find out how - Pursue a degree in the
Department of Physics & Astronomy

Beyond First Year Open House

Date: Thursday, March 30th, 2017

Time: 12:40 - 13:45

Location: HENNINGS 202

Join us for free sandwiches!

U·B·C DEPARTMENT OF
PHYSICS) ASTRONOMY

What happens when two black holes collide?

Find out - Pursue a degree in the
Department of Physics & Astronomy

Beyond First Year Open House

Date: Thursday, March 30th, 2017

Time: 12:40 - 13:45

Location: HENNINGS 202

Join us for free sandwiches!

**Beyond First Year:
Undergraduate Degree Programs in Physics and Astronomy**

12:40 – 13:45, March 30, 2017

Hennings 202

Sandwiches and drinks will be served

12:40 **Colin Gay, Department Head** - Introduction to the Department

12:45 **Chris Waltham, Undergraduate Chair** - What our graduates do

12:50 **Janis McKenna, Second Year Advisor** - 2nd Year

12:55 **Ingrid Stairs, Upper-Level Advisor** - Beyond 2nd Year

13:00 **Jaymie Matthews, Astronomy Program Chair**

13:05 **Vesna Sossi, Biophysics Program Chair**

13:10 **Javed Iqbal, Science Coop Program Director**

Clubs

13:15 Physsoc

13:20 Astronomy

13:25 Biophysics

QUESTION Period

What do UBC Physics and Astronomy grads do?

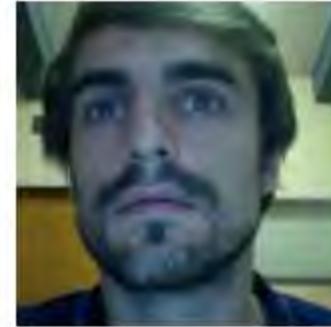
1. Look after the Earth



Melody Wong

My name is Melody Wong, and I graduated in 2013 with a B.Sc. Major in Physics and a Minor in Astronomy.

Since graduating, I have been hired by an Earth Imaging company called UrtheCast, and have worked there as a Junior Software Engineer. As well, I am currently completing a two year Computer Science program at UBC, with a focus in numerical computation. If I were able to somehow send a message to my past self (temporal paradox!) and give advice on schooling, I would say: "When making short-term goals, be realistic! Don't let yourself burn out! It is good to want to push yourself, but when planning out your time, you need to be realistic. You're human; you need time to eat, sleep, and be able to hang out with your friends outside of a study session. If you can't handle the workload, take fewer courses. Graduating a term later is not the end of the world. Best of luck in your future! Hope this message doesn't cause the universe to implode, but if it does, TAKE DATA! - Future Melody"



Clark Van Oyen

I completed a combined BSc in Physics and Computer Science at UBC in 2008.

During this time I attended co-op terms as a Programmer for carrier class telecom equipment at

companies including Ericsson, and a VOIP start-up where I developed automated product test systems.

After graduation and a brief period trying to found a startup during the depths of the recession in late 2008, I worked as a Programming Contractor and developed the core of two new technology products for Ecotrust Canada. The product teams grew until Ecotrust Canada and I joined the staff of Ecotrust Canada as Chief Technology Officer in Feb 2014, where I'm now immersed in the rapidly evolving enterprising non-profit.

My advice to new physics grads is to remember that while your specific training applies directly to a relatively narrow spectrum of careers, your aptitude for rigorous and methodical thinking in uncertain environments is valuable in a very wide band of industries outside of physics. Given the chance I would've taken a stats course – data science is hot right now.

What do UBC Physics and Astronomy grads do?

2. Look after us



Stefan Avall

After completing the co-op program and graduating from UBC with a **degree in Biophysics** in 2003, Stefan has worked in the medical device industry in Vancouver. After graduation, Stefan considered returning to school for either a PhD or an MBA, but eventually decided that the best career path for him would be to stay in industry. Stefan originally worked at Perceptronix as a software engineer and then as the software manager. He is now working at **Kardium**, where he is the product manager of the TORQ™, a surgical instrument for **cardiac surgery**, and also the clinical study manager for the Globe® mapping and ablation system, a new device to be in the diagnosis and treatment of atrial fibrillation.



Jaspaul Chung

My name is Constable Jaspaul Chung, and I graduated from UBC with a **BSc in Physics** in 2004. During my undergrad, I worked with Professor Halpern on a project called BLAST. BLAST was a balloon-borne telescope conducting surveys at sub-mm wavelengths that launched from New Mexico, Texas, Sweden and Antarctica. I then went on to work for D-Wave Systems, a company attempting to build the world's first commercial quantum computer. At D-Wave, my work focused on input/output wiring for samples in helium dilution refrigerators.

Following this work I changed career paths, and I currently work as a police officer for the **New Westminster Police Department providing technical analysis for fatal and serious injury collisions**. I am also currently enrolled in the MEng program at Ohio University specializing in Transportation Engineering.

What do UBC Physics and Astronomy grads do?

3. Basic Science (without a Ph.D)



Ryan Lovelidge

After three years (I completed my first year at Langara) of miraculously passing all my courses, I graduated in the Spring of 2012 with a BSc in physics with a minor in math.

The Summer after graduation was unremarkable, I just spent every day applying for jobs. I was hired in the Fall of the same year at TRIUMF as an Accelerator Operator. I work in the main control room of the 520MeV cyclotron on site.

As for advice to my younger self, I would have tried to give myself the focus and direction that I lacked that prevented me from attending post-secondary until my 30s.



Derek Kief

Holding a Bachelor of Science in Physics from the University of British Columbia (2014), Derek Kief is an energetic and passionate scientist with an uncanny ability to get

others excited about all things scientific. His background experiences range from a research position in a quantum devices lab to tracking wolves in the dead of winter. Derek's passion for knowledge is contagious, and he can frequently be found excited in the depths of some scientific discovery or at the observatory taking photographs to share with all. In addition to his duties at the H. R. MacMillan Space Centre as the astronomer, Derek is a fervent cinephile, intense baker, energetic volleyball player, and vocal singer in Chor Leoni.

What do UBC Physics and Astronomy grads do?

4. Things you might not have thought of

Madeline Hodgson

Madeline earned her undergraduate degree in **Honours Physics** in 2010. She went on to law school at U.B.C. and currently practices at Bull, Houser & Tupper LLP in Vancouver in the areas of **Dispute Resolution + Litigation and Intellectual Property**. During her degree, Madeline was President of the Undergraduate Physics Society, English Editor of the Canadian Undergraduate Physics Journal and presented her research at an international conference in Stockholm. Madeline earned her private pilot's licence in 2006 and enjoys flying locally in her spare time.



Danica Marsden



After completing a BSc in **combined honours physics & astronomy** at UBC, Danica pursued a PhD at the University of Pennsylvania in Philadelphia, specializing in experimental cosmology.

After completing her PhD in 2011, Danica accepted a fellowship at the Keck Institute for Space Studies at Caltech, and worked with a group at UC Santa Barbara to develop new astrophysics detectors. After 2 years in California, Danica decided to try her hand in industry, with a position in the new technology development group at Suncor, Canada's largest oil company. In 2015, however, she was wooed away by **D-Wave, the quantum computing company**, to be a technical project manager.



Products ▾

Why FME? ▾

Learning & Support ▾

About ▾



Free Trial

Olivia Wasalski, B.Sc. (Combined Honours Physics and Computer Science) 2014

Save Time with Data Integration

FME makes it simple to connect data and applications - and automate workflows.

Try FME for Free

Learn More

zendesk chat



We're online. Ask us anything!



Register for FME UC 2017
Join us for the biggest FME event



Q&A Forum for FME Users
Join the official user community



Unveiling
See what's new

Type your message here





SOLUTIONS

TECHNOLOGY

RESOURCES

ABOUT

REQUEST A DEMO

The Complete Solution for the Utility Mobile Workforce

Tricia Roberson, B.Sc. (Honours
Physics and Philosophy), M.Sc. 2014

Clevest helps utilities deliver safe, reliable and superior services through innovative field solutions

Make the **most** of your busiest storefront.

23%
increase in
revenue

50%
more
conversions

2-4x
faster

THE MOBIFY PLATFORM

Alicja Kielbik, M.Sc. 2013
Technical Writer

Laura Kasian, Ph.D (2012) Lead Production Pipeline Technician

IMAGEWORKS 2016 SIZZLE REEL

[read more»](#)



IMAGEWORKS
Sizzle Reel



SMURFS: THE LOST VILLAGE
Trailer

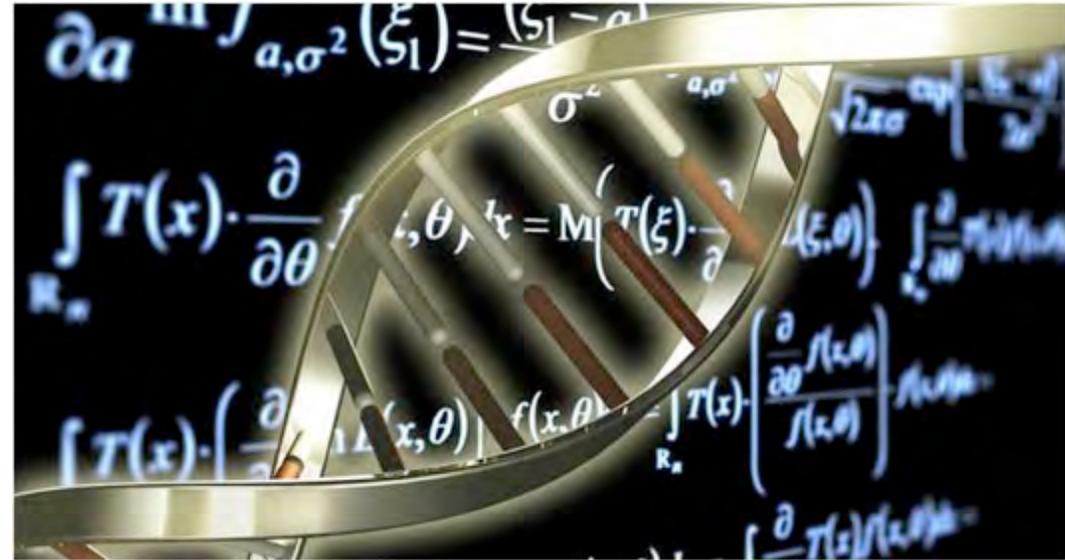
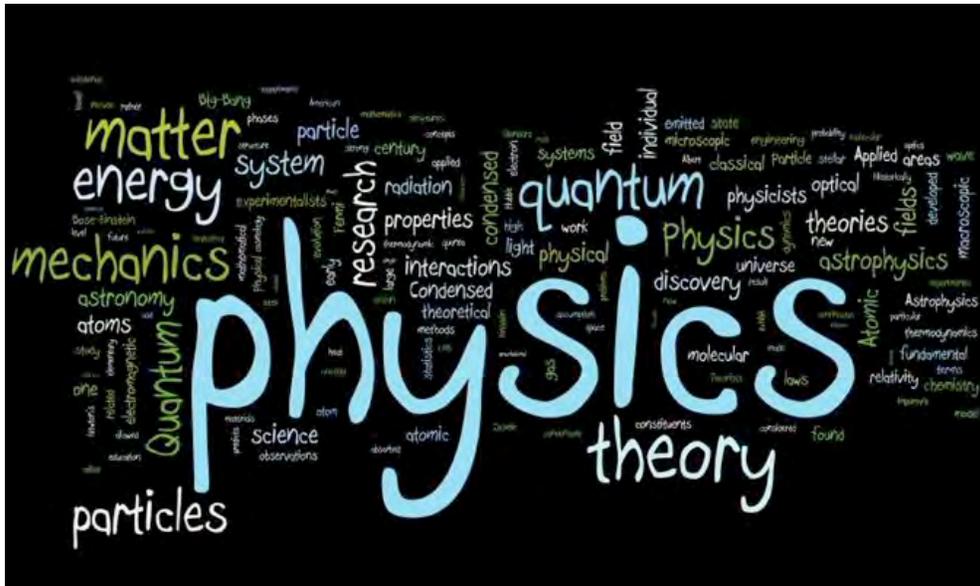


SPIDER-MAN™: HOMECOMING
Trailer

LATEST NEWS»

18 SCIENTIFIC AND TECHNICAL ACHIEVEMENTS
TO BE HONORED WITH ACADEMY AWARDS®

2nd year in Physics and Astronomy



Undergraduate chair: Chris Waltham
1st -year advisor: Stefan Reinsberg
2nd -year advisor: **Janis McKenna**
3rd- and 4th-year advisor: Ingrid Stairs
Astronomy advisor: Jaymie Matthews
Biophysics Advisor: Vesna Sossi



★★ Program coordinator: **Salena Li** ugcoord@phas.ubc.ca ★★
All of us are here to offer advice, help with any program/course issues.

2nd Year

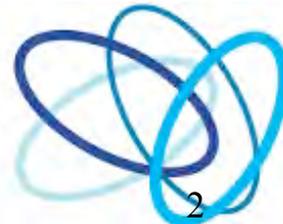
In 2nd year, Physics/Astronomy specialists enter one of our Programs:

- ★ **Honours, Combined Honours “PHYS + other”**
- ★ **Major Physics/Astronomy, Combined Major “PHYS + CPSC”**
- ★ **Combined Major in Science (3 specializations)**
- ★ **Dual Degree Program – BSc (Physics) & BEd (Secondary)**
 - BSc (Physics) & B Arts
 - BSc (Physics) & B Music
- ★ **Minor in Physics / Minor in Astronomy**

+You can do co-op in any program in our department

Co-op: Get a two year head-start on your career, gain valuable experience, work in Canada and/or abroad, earn good pay.

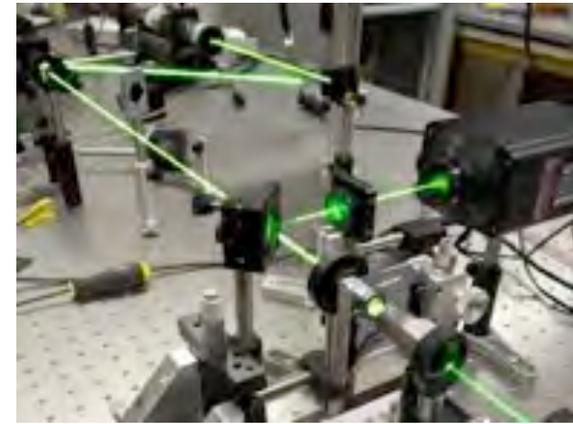
ubc science co-op



Honours

For students intending to enter career in research and/or continue to graduate school

- Honours Physics
- Honours Biophysics
- Honours Physics and Astronomy
- Honours Physics and Mathematics
- Honours Physics and Computer Science
- Honours Chemical Physics
- Honours Physics and another Science S



To remain in Honours: Take at least 30 credits each Sept-April or at least 15 credits per term if co-op- AND maintain average >68% AND fail no courses.

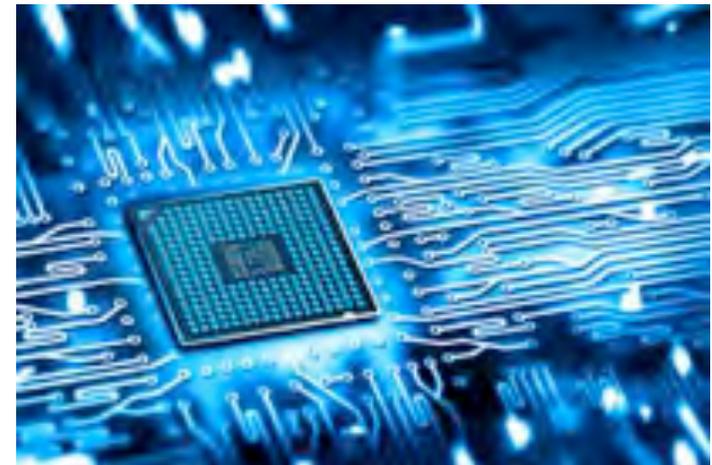
(didn't take 30 credits first year: will likely have to see a Science advisor to enter an Honours program – may not be accepted online → see a human)

We can help formulate a program which meets all honours requirements, Faculty Science requirements, & UBC graduation requirements

Major

- ★ For those intending to enter career in science/technology, education, science-related.
- ★ NOT the recommended stream for graduate studies (although some Majors who take all the core senior honours physics courses may get accepted to graduate schools.)
- ★ Offers more flexibility than Honours (fewer specified courses, more electives)
- ★ Easy to add a Minor to a Major (or Combined Major)

- Major Physics
- Major Astronomy
- Combined Major Physics and Computer Science
- Double Major in Science and/or Arts



Dual Degree

- ★ For those intending to add a second specialization outside of Science.
- ★ NOT the recommended stream for graduate studies, although students who take all core senior honours physics courses are often accepted to graduate schools.
- Dual Degree Science and Arts **BSc(Physics) & BA**
- Dual Degree Science and Music **BSc(Physics) & BMus**
- Dual Degree Science and Education
 - 5 year program:**
 - Dual Degree Program: BSc(Physics) BEd (Secondary)**
 - Graduate ready to accept teaching position**

Minor (for those in Physics/Astronomy)

★ If you're in any Physics or Astronomy Program: you may pick up a second specialization

★ Easy to add a **Minor outside Physics/Astronomy** Major Physics, Major Astronomy, or Honours Physics

★ Not a lot of “elective room” to add a minor to combined honours or combined majors program, but possible with careful planning.

- **Minor in another Science**
- **Minor in any Arts subject (Economics, Philosophy, a language are often seen, but any Arts minor possible)**
- **Minor in Commerce**
- **Minor in Human Kinetics**
- **Minor in Land and Food Systems**

Typically need 18 upper level (300- 400-level) credits – **See Calendar for specific Minors requirements in specific subject**

Graduation Requirements

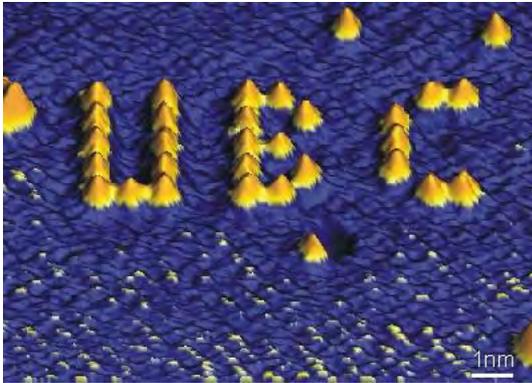
You are responsible for knowing your graduation requirements. Consult [UBC Calendar](#) and [Faculty of Science](#) online:

www.calendar.ubc.ca ← **ESSENTIAL REFERENCE**

- under “**Faculties, Colleges and Schools**” choose “**Science**” then “**Bachelor Science**” for all graduation requirements for any Science program (or “**Bachelor Arts**” for any Arts program)
Program specifics: continue and click “**Physics**” or “**Astronomy**”

All requirements for any Honours, Major, Minor program in any Faculty at UBC are specified in the **UBC Calendar**

Also see our **Physics Undergrad Program Webpages:**
<http://www.phas.ubc.ca/undergrad-degree-programs>
<http://www.phas.ubc.ca/undergrad-students>



3rd and 4th years in Physics and Astronomy

Undergraduate chair:

Chris Waltham

3rd- and 4th-year advisor:

Ingrid Stairs

Astronomy advisor:

Jaymie Matthews

Biophysics Advisor:

Vesna Sossi

Program coordinator:

Salena Li



3rd Year



Start focusing on advanced branches of physics:

Thermodynamics or Mechanics

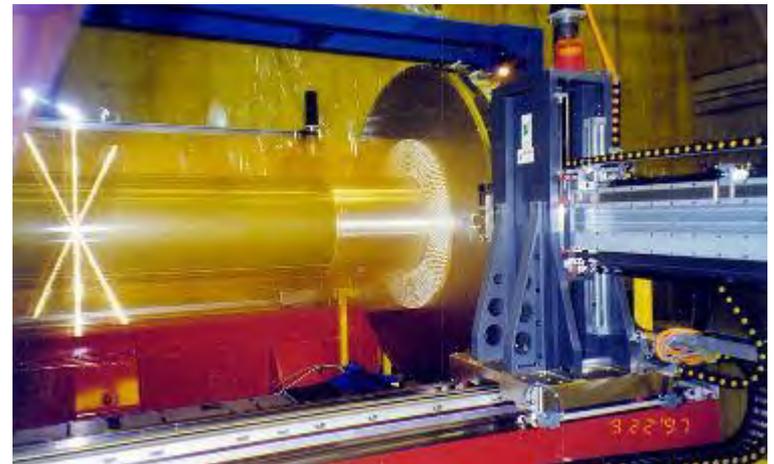
Mathematical physics

Electricity and Magnetism

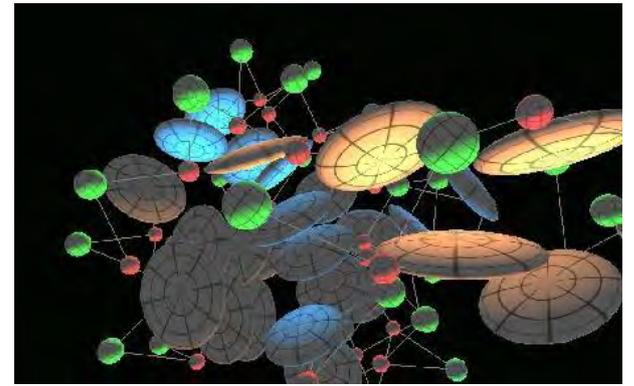
Electrical Lab

Quantum Mechanics...

and take several electives.



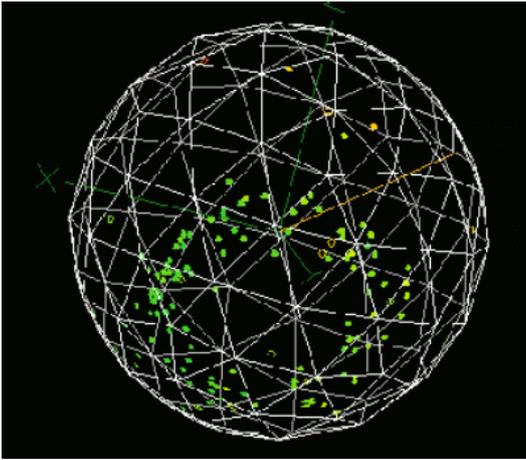
4th Year



Statistical Mechanics, Particle Physics,
Condensed Matter, Cosmology, etc.
Experimental Lab

High-level electives: specialize a bit in
the areas **you** find most interesting.

Honours students: Physics 449 thesis



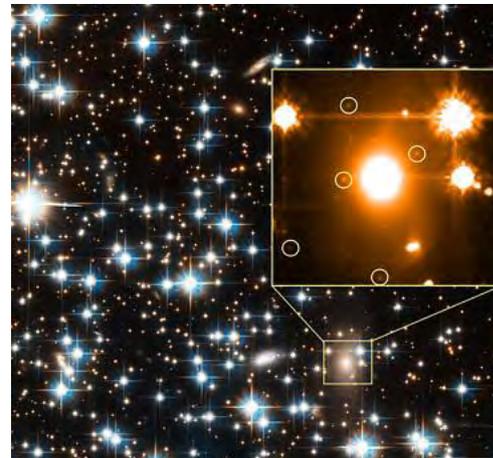
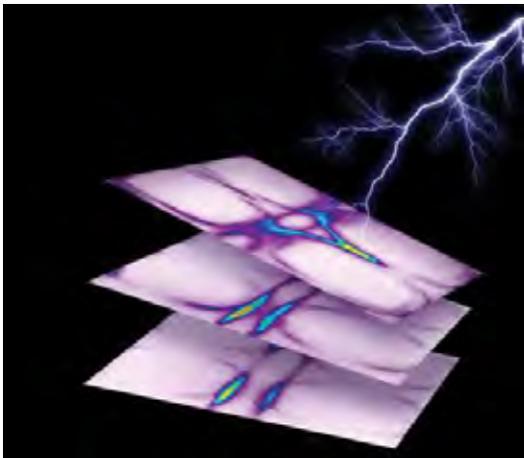
Honours Thesis (!?)

In 3rd year or beginning of 4th year, start talking to faculty members about their research – ask if they have 4th-year projects. Knock on doors, send email – don't be shy!

You'll work with the faculty advisor through the year and learn how to do research, how to write it up and how to give good presentations.

Can I do research before 4th year?

Yes! Every summer we (and other Canadian departments) offer the NSERC USRA program – apply in January. Many faculty also hire students for the summers and/or for co-op terms. Ask around – we are always looking for good students!



Other Research Opportunities

You can do 1-term research projects in PHYS 349 (but make sure to get approval from the advisors and from Vesna Sossi before registering for this!).

There are other research/exchange programs out there:

TRIUMF: <http://admin.triumf.ca/d2w-pub/studentjob/report>

NRC: <http://www.nrc-cnrc.gc.ca/eng/careers/programs/student-employment.html>

Go Global: <http://www.students.ubc.ca/global/learning-abroad/research-abroad/undergraduate-students/>

Germany (RISE): www.daad.org/

IAESTE: <http://iaeste.sa.queensu.ca/>

UBC Work Study/Work Learn:

<http://www.students.ubc.ca/careers/students/work-and-volunteer-opportunities/work-study-work-learn/>

Exchange Program

The Go Global program facilitates exchanges with universities around the world.

<http://www.students.ubc.ca/global/index.cfm>

Some advice: In terms of required courses and getting your thesis done, it's better to go on exchange in 3rd year rather than 4th year.

When planning your exchange, talk to Chris Waltham about which courses at the foreign university will be considered equivalent to UBC Physics & Astronomy courses.

Career Planning

Make an appointment at Career Services
<https://students.ubc.ca/career/career-resources>
for career or resume advising.

We hold a “Physics and Astronomy Career Night” every year, with panelists doing different things with their Physics or Astronomy degrees – great for exploring different options and networking!



Grad School – If you think you love research....

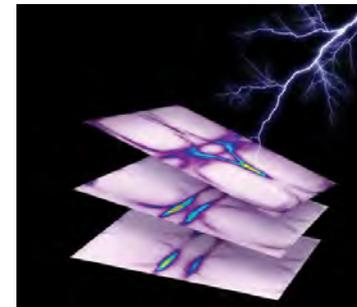
We'll offer advice on grad school applications at Imagine Day in September... or make an appointment with an advisor to discuss strategies.

Application deadlines:

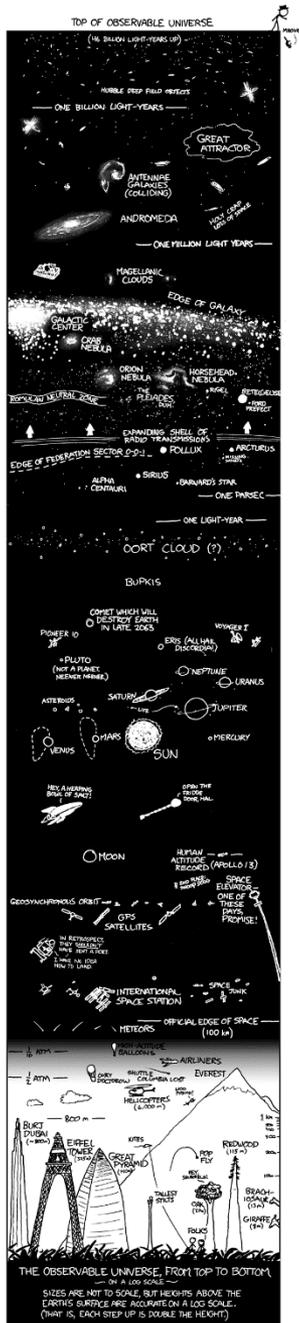
The **UBC** Physics & Astronomy deadline is *Dec. 15*.

Other **Canadian** schools will have deadlines in *January through March* – check their websites.

US schools typically have deadlines in *December or early January* – again, check their websites. These schools usually require the GRE exam: www.ets.org/gre which you should write in Spet. Or Oct.



distance and size scale of the Universe
xkcd.com/482/ on a logarithmic scale



CMB (Cosmic Microwave Background)

Other galaxies Large Scale Structure

Local Group of Galaxies

Milky Way

Star clusters and star/planet formation

Stars Exoplanets

Trans-Neptunian Objects

Planets, dwarf planets, moons, asteroids

Sun

Moon

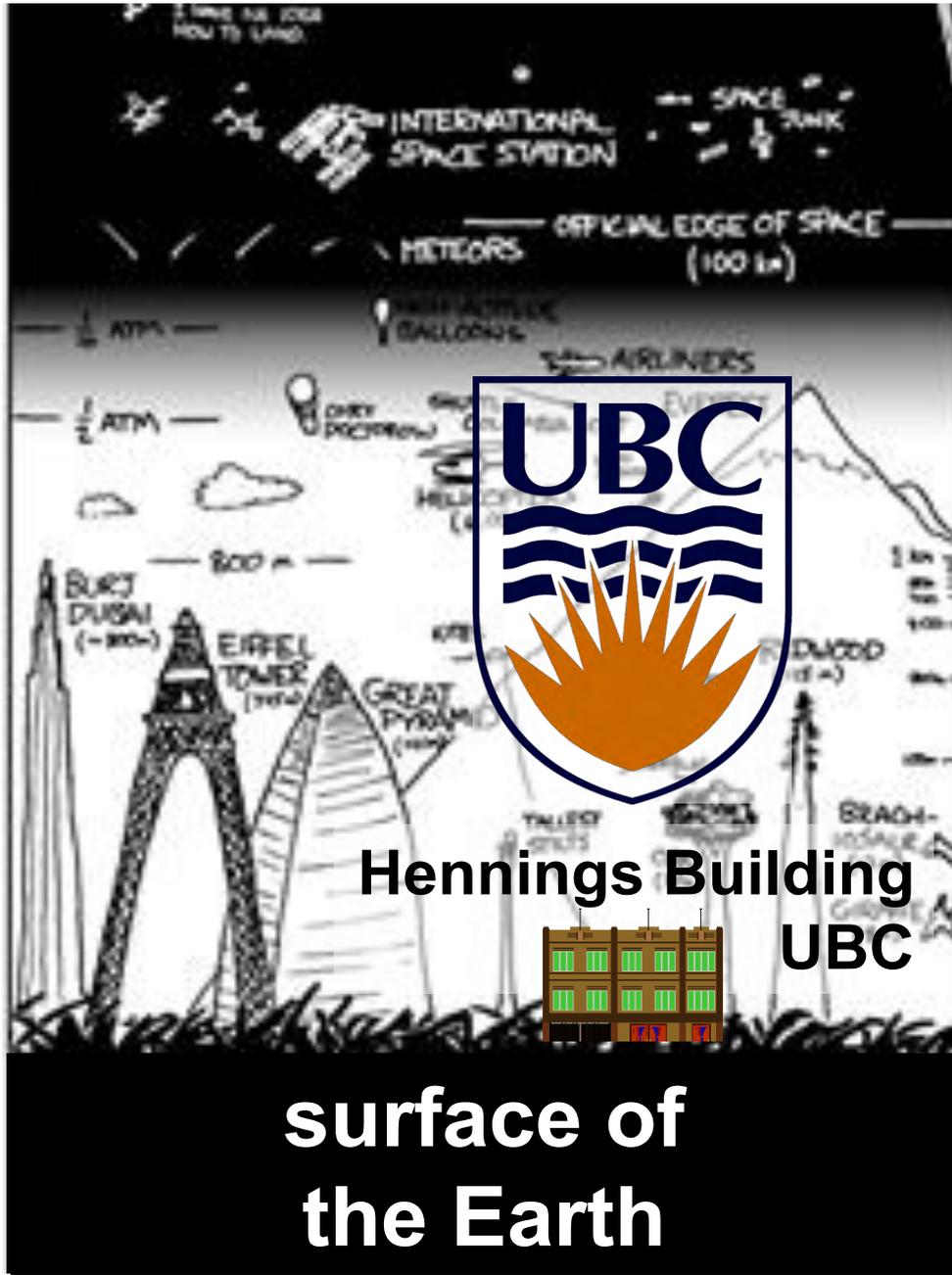
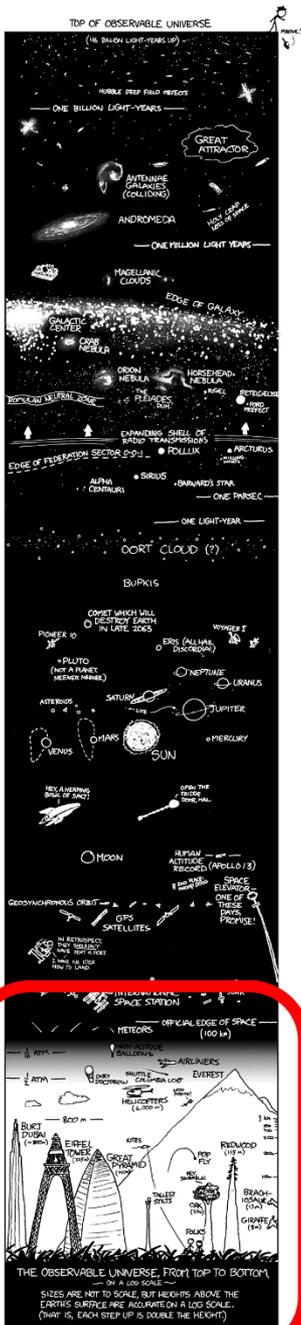
space telescopes

high-altitude balloons

surface of Earth

Largest telescopes

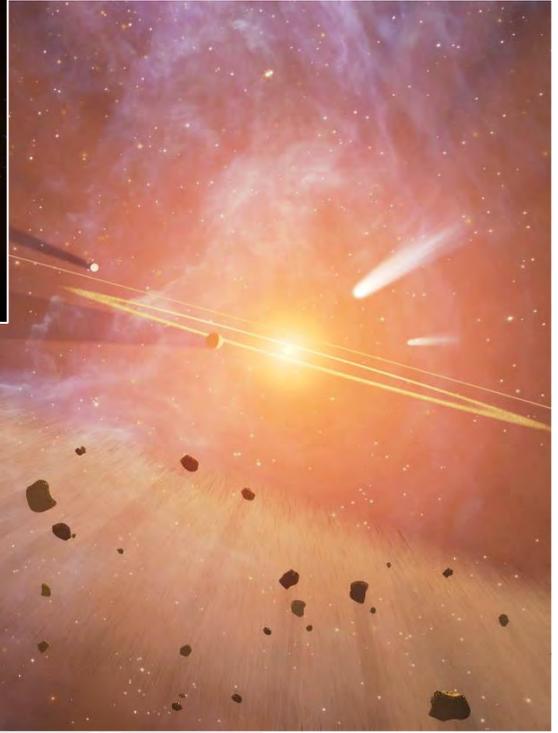
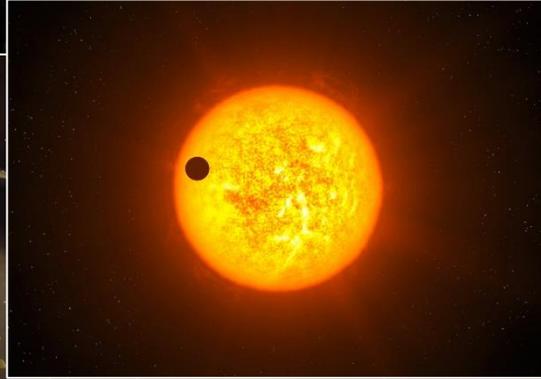
distance and size scale of the Universe
xkcd.com/482/ on a logarithmic scale



distance and size scale of the Universe
xkcd.com/482/ on a logarithmic scale



detecting exoplanets & planet system formation



other planetary systems

Forbes Magazine's Top 30 Under 30



Michelle Kunimoto on Forbes Lists

30 Under 30 - Science (2017)

Michelle Kunimoto

Master's Candidate, University of British Columbia

Age 23

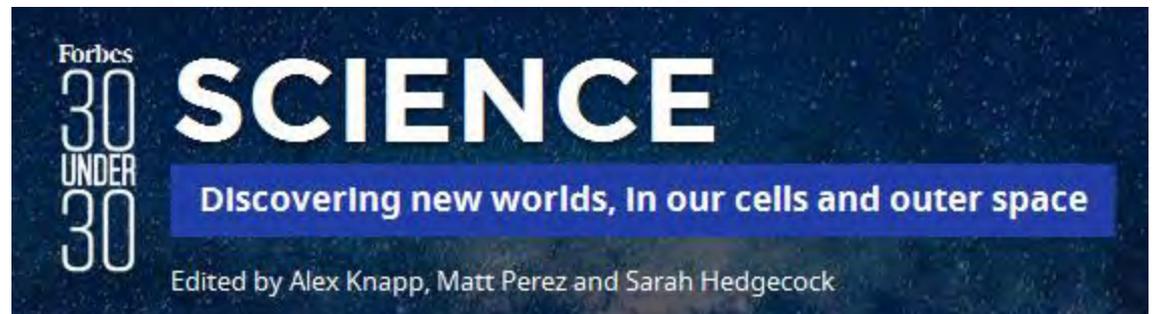
Residence Vancouver, Canada

Education Bachelor of Arts / Science, University of British Columbia

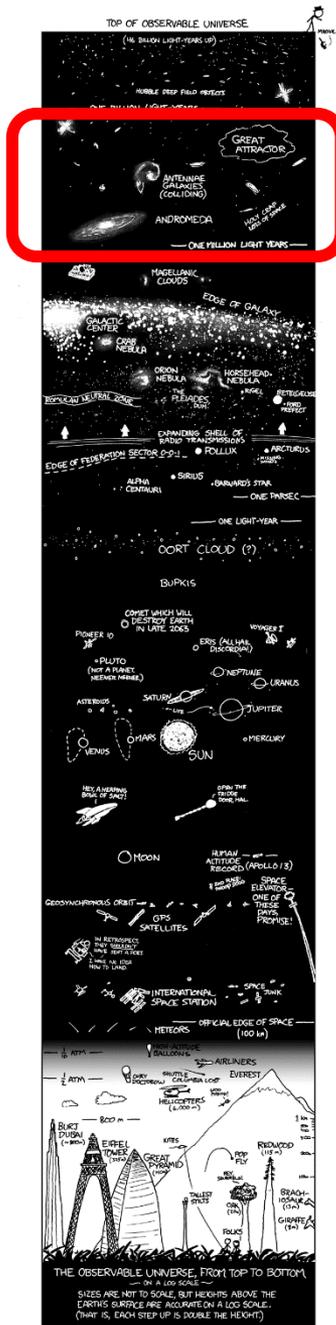
Currently studying astronomy for her Master of Science following her undergraduate in honors physics and astronomy, Kunimoto discovered four planet candidates using Kepler data. She also tracked the data necessary for astronomers to better understand a dusty hyperluminous quasar.



[www.forbes.com/
30-under-30-2017/
science/](http://www.forbes.com/30-under-30-2017/science/)



distance and size scale of the Universe
xkcd.com/482/ on a logarithmic scale

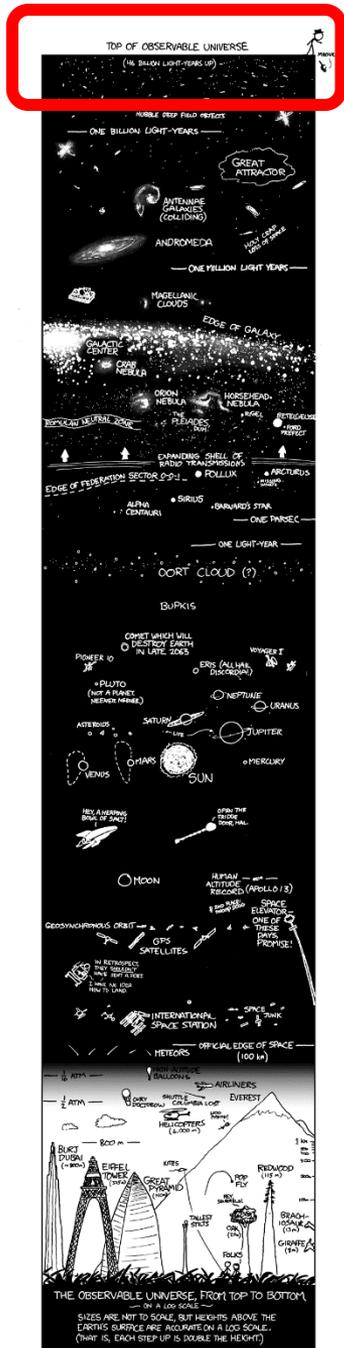


Hickson Compact Groups

Paul Hickson

**other galaxies
and galaxy clusters**

distance and size scale of the Universe
xkcd.com/482/ on a logarithmic scale



TOP OF OBSERVABLE UNIVERSE (14 BILLION LIGHT-YEARS UP)

Mark Halpern



Gary Hinshaw

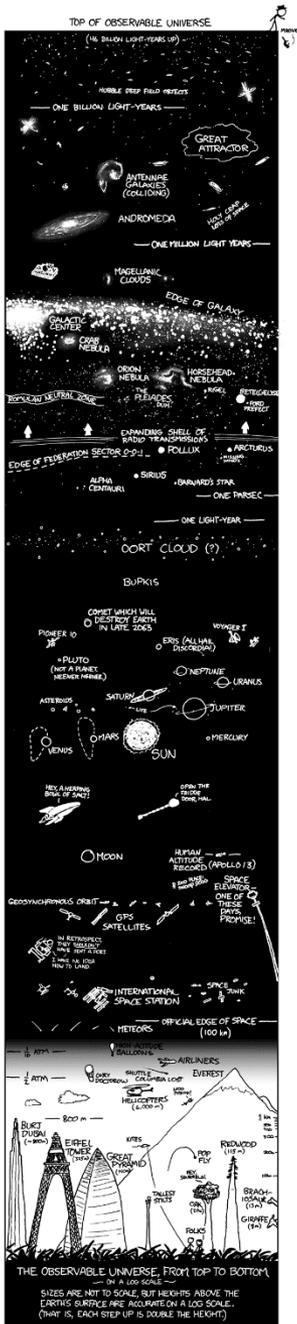


Douglas Scott



cosmology theory & observation

ASTR 200 Frontiers of Astrophysics



ASTR 403 Cosmology

ASTR 300 Galaxies

ASTR 406 High-Energy Astrophysics

ASTR 205 Stars & Stellar Populations

ASTR 333 Exoplanets & Astrobiology

ASTR 407 Planetary Science

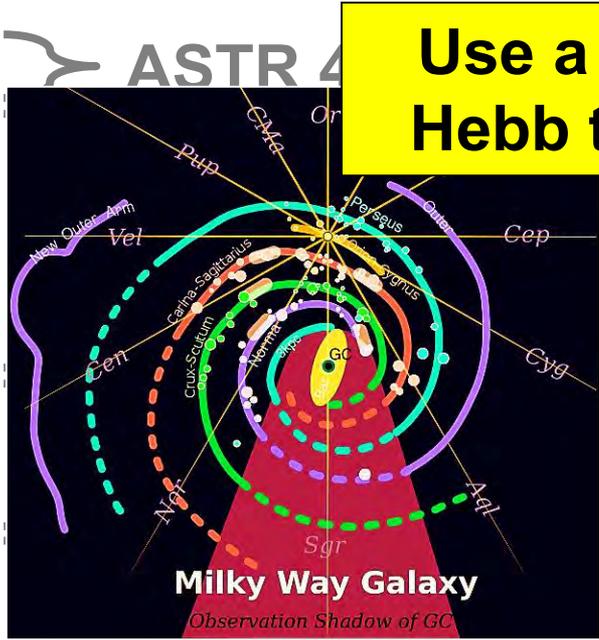
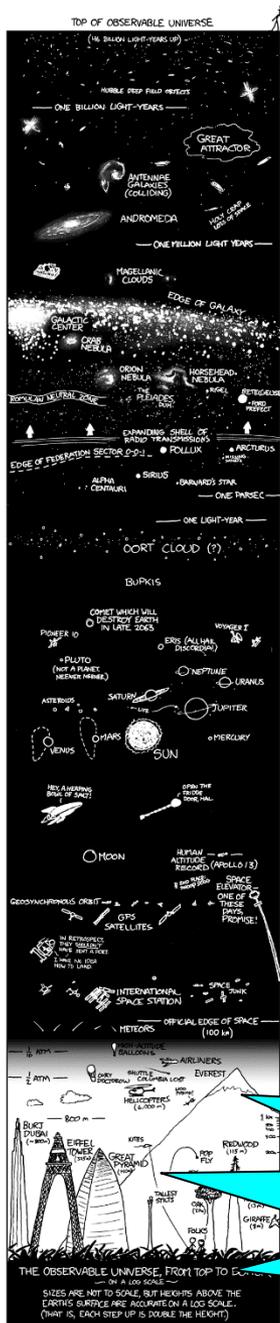
ASTR 405 Astronomical and
Astrophysical Measurement

ASTR 406 Astronomical
Laboratory

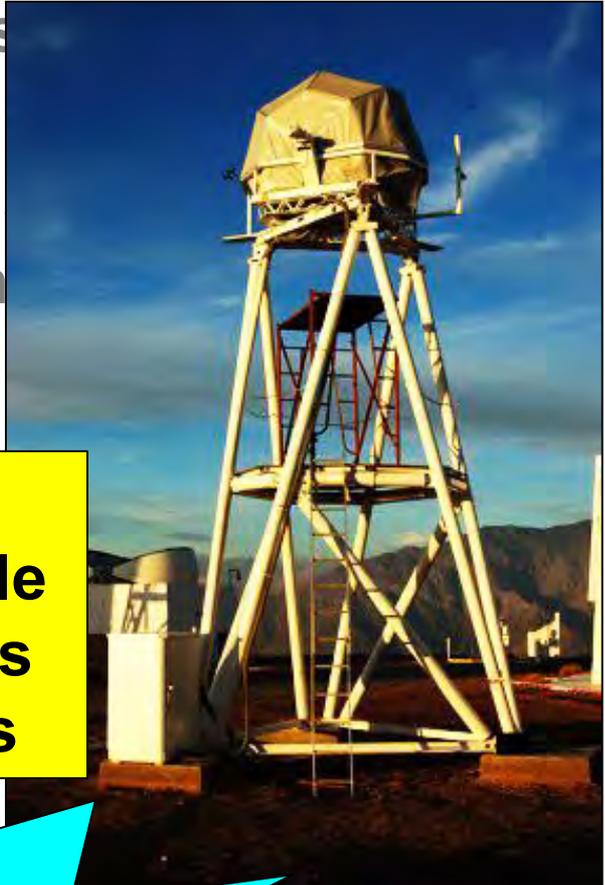
Honours Thesis Course

ASTR 449

ASTR 200 Frontiers of Astrophysics



Use a radio telescope atop Hebb to map the Milky Way



Remote-control the UBC telescope in Chile to record CCD images of the southern skies

ASTR 406 Astronomical Laboratory

Info on astronomy careers

www.cascaeducation.ca/files/careers.html

www.aas.org/education/careers.php

www.astronomycafe.net/qadir/acareer.html

*www.ras.org.uk/images/stories/ras_pdfs/
careers_v12.pdf*

Astronomy advising

*Prof. Jaymie Matthews
matthews@astro.ubc.ca
604-822-2696*

Honours biophysics program

Research areas (at UBC)

C Hansen

Area: Biophysics and Biotechnology

Field: Microsystems Technology for Biological Applications

Topics: Structural Biology, Single-Cell Analysis, Molecular Diagnostics

A Marziali

Area: Biophysics - Genomics Technologies

C Michal

Area: Nuclear Magnetic Resonance, Biophysics

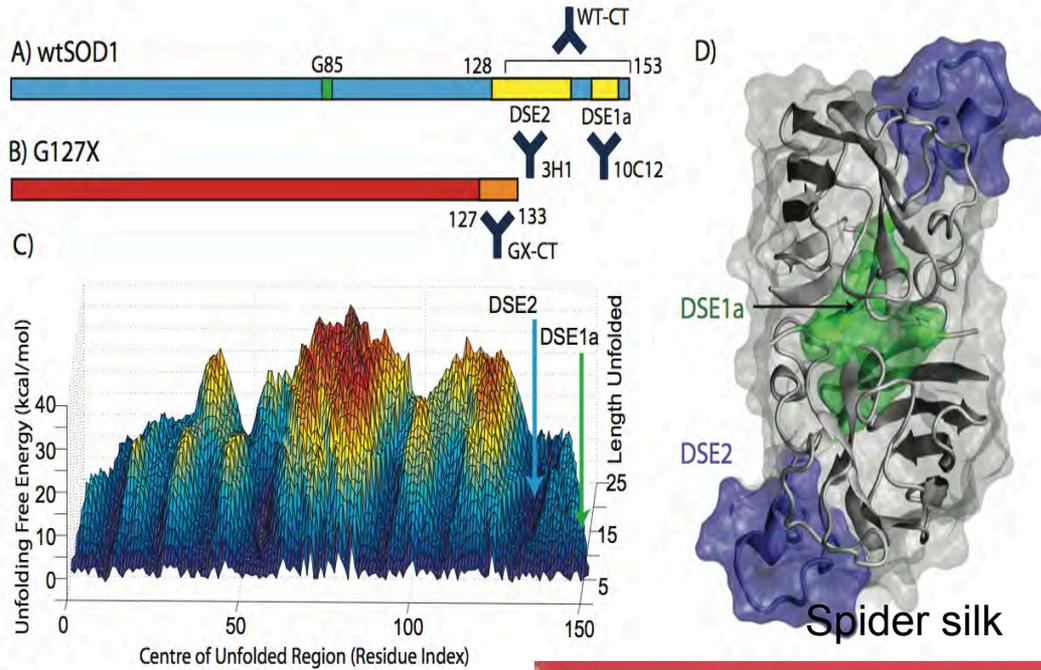
Topics: Biological Materials, Optical Pumping, Artificial Muscles, NMR

S Plotkin

Area: Theoretical Biophysics We do research at the interface of physics and biology. Our interests range from the study of dynamics and disorder in the theory of protein folding and function, to genetic and phylogenetic networks, to studies of pattern formation and symmetry breaking in morphogenesis.

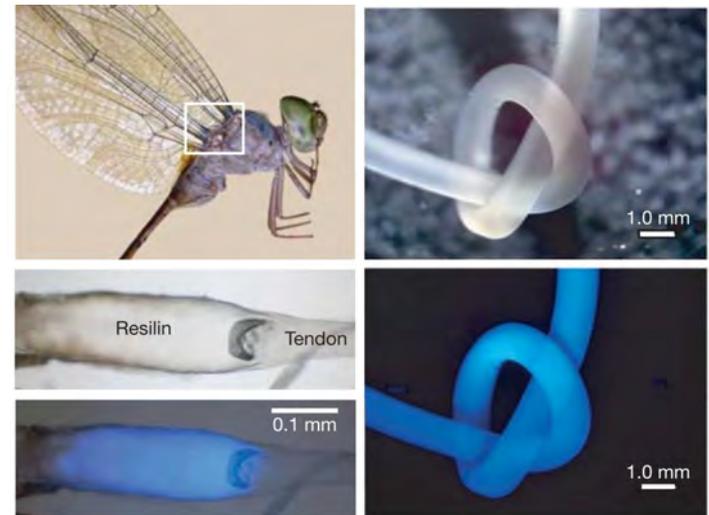
Plotkin group

Application of misfolding landscapes to predict disease-specific epitopes in SOD1

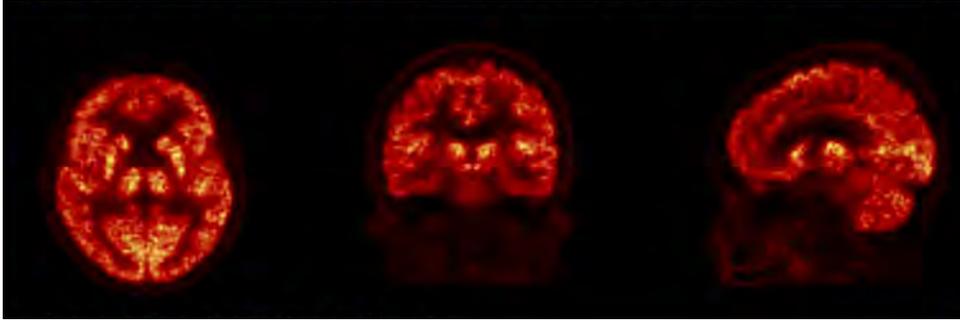


Carl Michal – Solid-State NMR of biological materials

Resilin

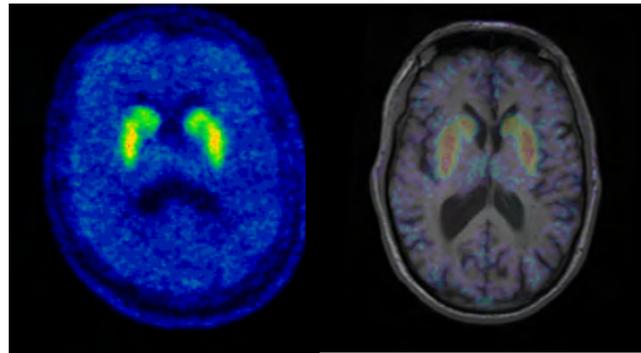


EXCELLENT ENTRY INTO MEDICAL PHYSICS (Sossi, MacKay)



Positron Emission Tomography

High resolution research tomograph
(HRRT) ~ 2000 ~ (2 mm)³

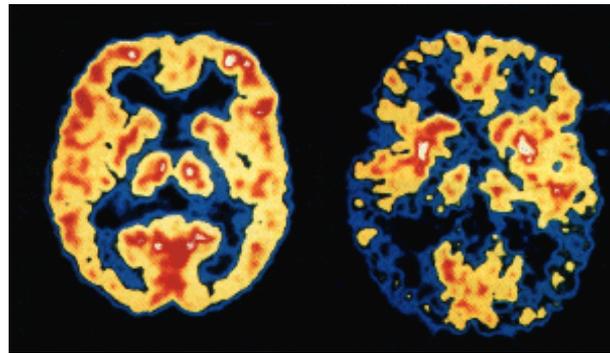


MRI

Brain imaging – increasingly more important as population ages

- can detect disease before clinical symptoms
- can help discover origin of disease
- can help monitor treatment efficacy

*Dementia
(^{18}F -FDG)*



Control

Alzheimer's

Research benefitting from **physics background** – positron emission tomography/ MRI:

Instrumentation: hardware and software development

Kinetic modelling and data interpretation

Data Acquisition development and image analysis

2nd year entrance: admissions regulated by the Faculty of Science

Science honours requirements
and at least 68% in all MATH 1 and PHYS 1 courses

AND

(<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,434#5884>)
<http://science.ubc.ca/students/degree/apply/req>)

BIOL 112^{1,2}, 140

PHYS 107, 108, 109 (or 117, 118, 119 or 101, 118, 119)^{2,3}

CHEM 121, 123 (111, 113)²

MATH 100, 101 (120, 121 or 102, 103 or 104, 105)² Differential and Integral Calculus 6
Communication Requirement⁴

Elective^{5,6,16}

Total Credits Year 1 33

SCIE 001 can replace Chem, Phys, Math and Bio - need to have SCIE 001 + Biol140

To remain in the biophysics honours program:

UBC Science requires:

1. complete all courses attempted (no failed courses),
2. complete a minimum of 30 credits per winter session (often more are needed)
3. complete at least 132 credits
4. maintain a minimum 68% average per academic session.

Entrance in the 3rd year: still possible

At discretion of PHAS Biophysics (V Sossi) and
Undergraduate Advisors

Requirements:

- Average of at least ~ 72% in the second year
- Have never failed a course
- Have taken a minimum of 30 credits in the second year
- Course content adequate for the biophysics program

These are minimum requirements – applications will be considered on a case by case basis.

Recommendations:

Follow as close as possible the program outlined for the Honours Biophysics program in the second year.

http://www.physics.ubc.ca/undergrad/bh_intro.php

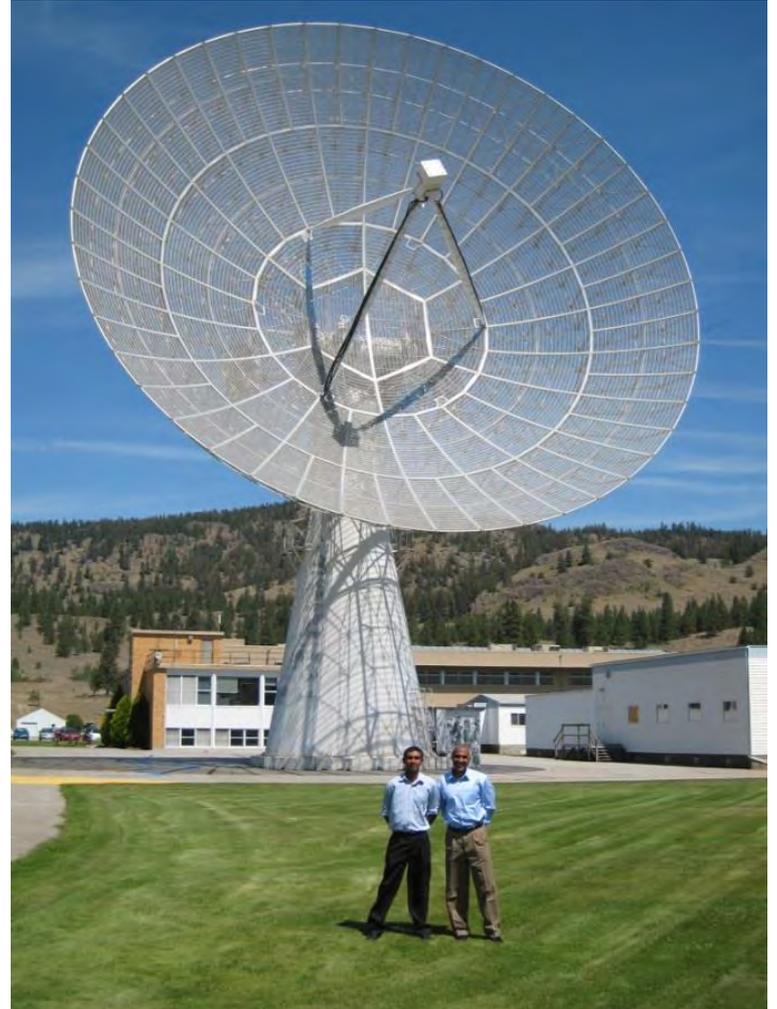
Come and talk to the Program Advisors

UBC Science Co-op

Javed Iqbal

iqbal@phas.ubc.ca

www.sciencecoop.ubc.ca



Science Co-op Programs

Atmospheric Science	Biochemistry	Biophysics	Biopsychology	Biotechnology
Chemistry	Cognitive Systems	Computer Science	Earth & Ocean Sciences	Engineering Physics
Environmental Sciences	General Sciences	Integrated Sciences	Land & Food Systems	Mathematics
Microbiology	Pharmacology	Physics & Astronomy	Statistics (Undergrad & Grad)	And more...

What is Co-op?

- Integration of academic studies with relevant, paid, supervised and productive work experience.
- Co-op students gain skills and experience which prepare them for the future job market, graduate studies and give them improved employment opportunities upon graduation.

Average monthly salary for Physics/Astronomy Co-op: \$2200

PHYS/ASTR Schedule -1

Year	Term1	Term 2	Summer
1	ST 1	ST 2/apply	
2	ST 3	WT1	WT2
3	ST 4	ST5	WT 3
4	WT4	ST 7	WT 5
5	ST 7	ST 8	

Phys/Astr Schedule -2

Year	Term1	Term 2	Summer
1	ST 1	ST 2	
2	ST 3	ST 4	
3	ST 5/apply	ST 6	WT 1
4	WT 2	WT 3	WT 4
5	ST 7	ST 8	

Benefits of Co-op

- Practical experience
- Work on real life problems
- Networking
- Increased job prospects after graduation
- Life skills

Where will the Physics Co-op students be working this Summer?

Physics/Astronomy

- IQbit
- Automotive Fuel Cell Corp.
- Evident Point Software
- Grin Technologies
- Institute for Chem. Sci. (Singapore)
- Laser Zentrum Hannover (Germany)
- Max Planck Institutes (Germany)
- National Inst. for Nanotechnology
- Paragon Testing
- Robert Bosch (Germany)
- RCMP
- Triumph
- Tableau
- UBC (PHAS, CHEM, EOS)

- University of Waterloo
- University of Wurzburg

Biophysics

- BC Cancer Research Centre
- Food & Agr. Org. of UN (Italy)
- SickKids
- Inst. for Research in Imm. and Cancer (Singapore)
- iProgen Biotech
- Max Planck Inst. (Germany)
- McGill Univ. Lady Davis Hospital
- National Univ. of Singapore
- Triumph
- UBC (Dept. of Physical Therapy)



Program Fees

- Co-op workshop fee: \$ 242.25
- Co-op work term fee: \$ 745 per WT
- Total cost of program: \$ 3,200

Application Criteria

- Must have a minimum “B” average
- Willingness to work anywhere in Canada
- Positive attitude. Keen interest in chosen field.
- Each candidate is interviewed to assess their suitability to the program.

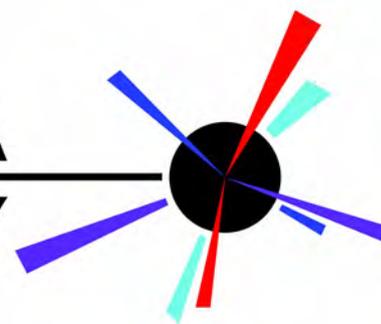
Application Deadlines

Program:	Application Deadlines
PHYS/ASTR	March 1 st , 2017 September 30, 2017

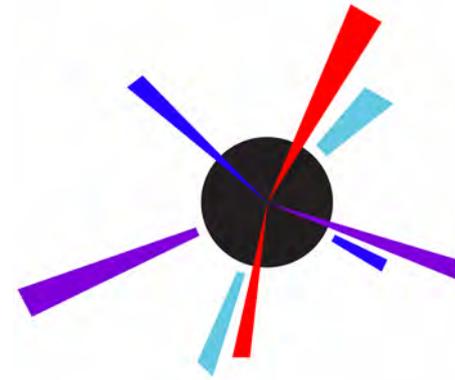
Apply online at
www.sciencecoop.ubc.ca

UNIVERSITY OF BRITISH COLUMBIA

PHYSICS SOCIETY

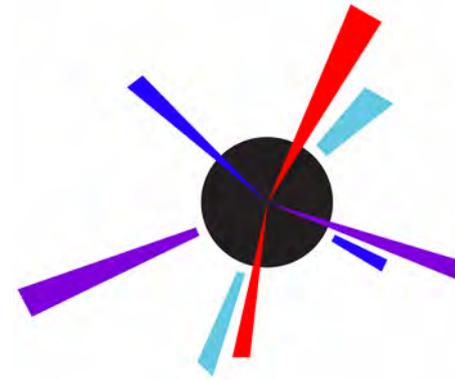


The Physics Society



- A club supporting the undergraduate community of the Physics & Astronomy Department through multiple academic and social events
- A bridge connecting the students and the department
- A club for people who study physics, who enjoy physics, or who just want a cool place to spend their time with good company

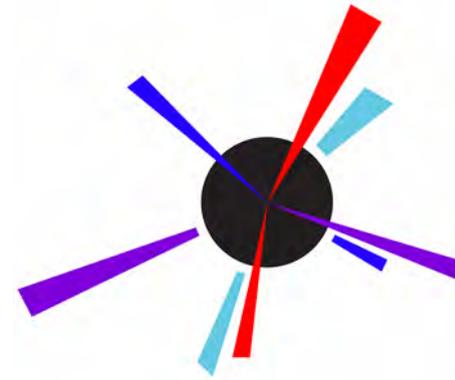
Physsoc Lounge



- Hennings 307
- Main social-study lounge for collaboration
- Silent study space
- Foosball table
- Microwaves
- Cheapest pop on campus!



Academic Events

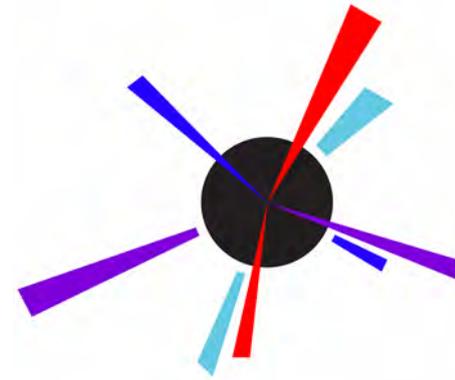


- Beef & Pizza
- Exam Pack Sales & Review Sessions for first-year Physics courses
- Python & LaTeX Workshops
- Lecture Series
- Mentorship Program

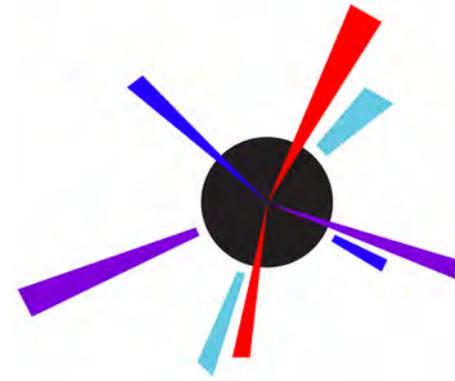
A poster for a lecture by Dr. Jaymie Matthews. The poster features the University of British Columbia Physics Society logo at the top. The text reads: "UNIVERSITY OF BRITISH COLUMBIA PHYSICS SOCIETY presents a lecture by Dr. JAYMIE MATTHEWS 'Exploring Planets Far, Far Away... Without Hyperdrive'". Below the text is a photograph of Dr. Matthews, a man with glasses, holding a glowing orb. At the bottom, it says "Everyone Welcome Sept 30th at 4pm Hennings 318". There is also a small image of a person in a space suit and a small image of a person in a Star Wars costume.

Social Events

- Wine & Cheese
- Year End Dinner
- Welcome Back BBQ
- Pi Day Bake Sale
- UBC REC Events



How to reach us



- Physsoc Lounge (HENN 307)
- Facebook: The UBC Physics Society
- Email: physsoc@phas.ubc.ca
- Website: physsoc.phas.ubc.ca

THE UBC ASTRONOMY
CLUB

WHAT DO WE DO?

- DARK SKY OBSERVATIONS!
- ACADEMIC LECTURES!
- SOCIAL NIGHTS! (Stormcrow Tavern, Trivia, Games)

DARK SKY OBSERVATIONS!

PORTEAU COVE PROVINCIAL PARK!





ACADEMIC LECTURES!

Astronomy Club Lecture Series

Series 1: Under the Light of a Red Sun:
Prospects for Life on Planet Proxima B,
with Professor Jaymie Matthews.

Hennings 201 on October 4, 5pm.

(free pizza for members of the astro club)



Astronomy Club Lecture Series

Series 2: What do we know about the universe?
with Professor Douglass Scott.

Hennings 200 on November 8, 5pm.



SOCIAL EVENTS!

LIGHT PAINTING!



facebook.com/uptastronomyclub
instagram.com/uptastronomyclub

COME WONDER WITH US!

FACEBOOK: THE UBC ASTRONOMY CLUB

