Stony Brook University

Welcome to the Physics and Astronomy Graduate Program!

-Matt Dawber, GPD, August 16, 2021

FAR BEYOND

Stony Brook University

The Programs

PhD and MSI students are supported by Teaching Assistantships. This is a serious commitment of time and energy. We will be spending much of this week on training you for your role as TAs.

Besides teaching, **PhD students** should concentrate on fulfilling the course requirements and getting to know the research groups in the department and aim to work with one of them in their first summer.

As **MA students** do not generally teach they should pursue a balance of courses and research. Be careful not to overstretch yourself by taking too many demanding courses!

MSI students follow a specific program, you should work with Prof. Hal Metcalf to build this.

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The Department

Governance

Chair: Chang Kee Jung

Committees: Admissions Committee, Graduate Committee, Mentoring Committee, Exam Committee, Diversity Committee

Undergraduate Program Director: Bob McCarthy

Graduate Program Director: Matt Dawber

Faculty Meetings: meets 4-6 times a year

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The Department

Staff

Main office

- Don Sheehan (Assistant Director of the Graduate Program)
- Diane Diaferia, (Assistant to the Undergraduate Program Director)
- Jin Bentley (Business Manager)
- Vicky Grove (Grants Manager)
- Nathan Leoce-Schappin, Assistant to the Chair
- Frank Chin, Director of the Physical Laboratories
- Rich Berscak, Building Manager

Instructional Laboratories

- Bent Nielsen
- Andrzej Lipski

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The Department

Faculty

Regular Faculty – the ones you are most likely to encounter teaching your courses and conducting research on-site in our department

Adjunct Faculty – people whose primary appointment is outside Stony Brook, frequently at BNL, but have an appointment to allow them to supervise graduate students

Affiliated Faculty - people whose primary appointment is at Stony Brook but not in our department, but have an appointment to allow them to supervise graduate students

Students

What this is really all about. Your education is our mission and we need you for our research!

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The University

Graduate School

- Dean: Eric Wertheimer
- Assistant Deans: Lori Carron (Finance), Melissa Jordan (Student Services)
- Student Services: Christine Greenberg (Director), Jessica Armstrong, Stephen Hayes, Chantalle Baranello
- Graduate Student Advocate: Julia Brown

International Services

- Assistant Dean: Lindsi Walker

Graduate Student Organization (GSO)

- President: Maryam Ahmed
- Speaker: Helena Van Nieuwenhuizen (P&A)
- P&A Senators: Michael Giles, Aniruddha Venkata

Graduate Student Employee Union

Stony Brook Research Assistants Union

The University

University Senate

- President: Richard Larson
- Graduate Council: Approves all the rules you will be living by

Executive

- President: Maurie McInnis
- Provost: Paul Goldbart
- CAS Dean: Nicole Sampson

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Research Groups

- Accelerator Physics
- Astronomy
- Atomic, Molecular and Optical Physics
- C.N. Yang Institute for Theoretical Physics
- Condensed Matter Physics
- High Energy Physics (Experiment)
- Institute for Advanced Computational Science
- Nuclear Physics - Experiment
- Nuclear Physics - Theory
- Physical Biology - Laufer Center
- Simons Center for Geometry and Physics

Other Opportunities

Laboratories outside Stony Brook at which you might do your thesis research

- Brookhaven Laboratory (BNL): RHIC, NSLS-II, Center for Functional Nanomaterials
- Cold Spring Harbor (CSH): biological sciences
- CERN: Atlas
- Neutrinos: DUNE, multiple experiments in Japan, IceCube

Your role

- Student: Pass exams, register for courses, do homework, pass tests, keep grade point average, watch for deadlines.
- Teacher: Teach undergraduate lab courses (occasionally recitations), grade exams and homework.
- Researcher: Focus your interest, find and advisor, learn a specialized field, do your own research
- Citizen: Be involved socially, vote at elections, help other students, be supportive and understanding, do not tolerate academic or scientific dishonesty.
- US Citizens or Permanent Residents: Become a NY State Resident as soon as possible! Otherwise you will be responsible for the difference between in-state and out-of-state tuition.
- Keep your eye on the ball. Your main goal is to get your degree as soon as possible

Mentoring Program

We have a mentoring program to provide guidance and support. We are continuing to evolve this program to improve it. You will learn more about this year's mentoring program on Friday

Information

Webpage: Look at degree descriptions and FAQs

https://www.stonybrook.edu/commcms/grad-physics-astronomy/degrees/

https://www.stonybrook.edu/commcms/grad-physics-astronomy/resources/FAQ.php

Course Webpages can be found from the table at

https://www.stonybrook.edu/commcms/grad-physics-astronomy/courses/

Past comps exams

https://www.stonybrook.edu/commcms/grad-physics-astronomy/resources/Comps.php

Questions

Ask Don or me if you have any questions. Tell us if you have any problems. The sooner we know about something the better we can deal with it, especially at the beginning of semester when we are busy and there are a lot of deadlines.

Exception: visa problems, go directly to International Services Office, you can tell us about the problems, but there is little we can do.

Orientation Videos

There are 7 videos from the Graduate School at:

https://grad.stonybrook.edu/current_students/orientation_videos.php

- Introduction
- Policies and Procedures (2 parts)
- Health Insurance
- Sexual Harassment and Discrimination
- Library and Technology
- Graduate Student Life

If you have not watched these do so as soon as possible

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University TA Training

For 2021, Teaching Skills Orientation includes two parts: Part 1 a self-paced training course available online through Blackboard starting August 9th, and Part 2, some follow up discussions in Spring 2022.

PART 1: SELF-PACED BLACKBOARD COURSE

This online, asynchronous and self-paced TA training gives graduate students an overview of a variety of relevant topics in teaching and learning to help them develop their pedagogy and teaching philosophies as a TA at Stony Brook and for future careers. ***You will need your netid set to be added to the course, so please try to do this by August 6! See FAQ at the end of this document for additional information.***

DATES: The course will open starting Monday, August 9, 2021, and those who complete it by September 10 can earn a certificate of completion. The required material in each module should take less than an hour to go through, so all four modules should take 3-4 hours to complete. The material, however, will be open and available to participants as an ongoing resource.

FORMAT: The training takes place online through Blackboard. Students will receive an email directly from Blackboard to their Stony Brook e-mail address. Connecting only requires an internet connection, although the best way to access Blackboard is with a computer instead of a mobile device.

CONTENT: The training consists of 4 modules. Modules 1 and 2 are an overview of how to be a successful TA, including TA responsibilities, expectations, interaction with students, and time management. Modules 3 and 4 focus on evidence-based teaching strategies for both online and face to face classes. In these modules, graduate students will complete brief readings, watch short presentations or videos, and complete optional quizzes at the end of each module. Each module should take less than an hour to complete.

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IT

The Solar System is a WEB portal for many of the University's services. It is used for class search and registration, to access course grades and an unofficial transcript, housing requests, to manage personal information, etc. Your Solar account is created when you get your Stony Brook ID number.

Blackboard is a class management interface. Using this system, instructors can post homeworks and mid-semester grades, send emails to the students, among other functions. Graduate students are will most likely also have to learn to use Blackboard as instructors of laboratory courses.

Email at Stony Brook is run by the Google email system. Details can be found on the Google Mail Website. All students get an email account in the format firstname.lastname@stonybrook.edu.

Stony Brook University

IT

- The University has "SINC sites" with computers installed for use by the students (these sites are used mostly by undergraduates).
- There is free file storage space up to 2GB on the University's servers (MySBfiles).
- Various software is available for free or at reduced cost, please consult the DOIT Software Catalog to find if something you need is available and the best way to get it
- For general productivity software, Microsoft Office can be downloaded for free or you have access to unlimited storage on Google Apps through your Stony Brook Google account. Of course the open source purists among you can just go and get LibreOffice and leave the University out of it!
- If you want to make a website the easiest way is probably to use SB You.

Stony Brook University

IT

First Steps

WolfieNet is the campus wireless network which you will want to get connected to. You should also set up your Solar Account and NetID

Go to https://it.stonybrook.edu/services/wolfienet for instructions

WolfieNet can also be accessed through Eduroam and I recommend setting this up so that you have access in many places when you travel (or are at BNL). https://it.stonybrook.edu/services/eduroam

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Wired network access

To connect your computer to the network, you need an IP address.

To get an IP address in the ESS building, email Doug Swesty (Douglas.Swesty@stonybrook.edu).

To connect to the wired internet in the Physics and/or 6th floor of Math buildings you need to register your computer (in fact your computer's network card). To do this, send a request to Dean Schamberger (dean.schamberger@stonybrook.edu) with the following: information:

1. Your full name and status (graduate student, visitor, etc.)

2. Your office location and telephone number.

3. Your research group if you belong to one.

4. The type of computer (laptop or desktop).

5. Is the computer for personal use or part of the research group, ie, who owns it?

6. The name you want for your computer

7. The operating system the computer runs (linux, Unix, Windows, Macintosh, etc.).

8. The MAC ("Media Access Control") or physical address is a hardware addressthat uniquely identifies each node of a network.

To get the physical address on a Linux or Macintosh computer, run the ifconfigcommand. The physical address is six pairs of hex digits separated by colons, labeled "ether" under "en0:" Example: "ether 00:25:4b:b1:58:f0"

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Email

The Electronic Post Office (EPO) gives you a generic email address (usually Firstname.Lastname@stonybrook.edu) that directs email to your Stony Brook Google Mail account. You all have such an account and all university email goes to this account

WE WILL USE THE GENERIC EMAIL ADDRESS IN ALL COMMUNICATIONS, AND IT IS YOUR RESPONSIBILITY TO READ THIS ACCOUNT OR TO MAKE SURE THAT THE MAIL IS FORWARDED TO AN ACCOUNT THAT YOU READ!!!

Video conferencing

The most frequently used software for video conferencing and online classes is currently Zoom. You have access to this through your Stony Brook NetID and Password.

An alternative that some faculty may use is Google Meet.

Copy Machines

- To use one of the copy machines for research or teaching purposes please see the main office for the key to the copy machine room (P-115)
- Please report any difficulties with the copy machine to the Main Office.

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ID Card

You have a campus ID number that will allow you to log-on to the SOLAR where class rosters/grades, etc. information can be accessed.

You should as soon as possible get a campus card

https://www.stonybrook.edu/campuscard/

This card will let you access the building after hours

Your ID card also gives you the ability to become a member of the Island Federal Credit Union, which has a branch in the basement of the Student Activities Center, Rm. 009B.

Parking

- Students with a TA or RA appointment may obtain a Faculty/Staff parking permit for your car by logging onto http://www.stonybrook.edu/parking . You will need to provide your USB ID Number (or Social Security Number) and the license plate number from your car.
- Other students can apply for a Commuter permit and park near the station or the South-P lot and take a bus.

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Pay Checks

State paychecks will be mailed to your listed address every other Wednesday. Direct Deposit is strongly encouraged.

Research Foundation paychecks mailed every other Friday. Direct Deposit is strongly encouraged.

Attendance Rosters must be signed electronically each month for either payroll roster.

I will approve students supported by the State.

Please see emails regarding Direct Deposit for either State or Research Foundation forms. This is a convenience to you, and highly encouraged university practice.

You can see your pay stubs on Solar.

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Travel

All travel by students on visas has to be approved by the International Services Office. You will need a letter of Good Standing which can be provided by Don.

When classes are in session you should avoid any travel. If you have to leave nevertheless, please let me know and tell me which arrangements you have made to cover your TA duties if applicable. Also tell the Professors whose course you are taking.

If your travel is supported by grants your travel needs to be approved via Foreign Travel Request Form and then it will be approved by your advisor. It is recommended to have your airfare arranged by the administrative assistant of your advisor so that you do not have to put up the money for the trip.

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Websites

Stony Brook University

http://www.stonybrook.edu

Department of Physics and Astronomy

http://www.physics.sunysb.edu/Physics/

Graduate Program

https://www.stonybrook.edu/commcms/grad-physics-astronomy/

Graduate School

https://grad.stonybrook.edu

IT guides

https://it.stonybrook.edu/services/it-guides

Solar

https://it.stonybrook.edu/services/solar

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Medical Advice

- Hepatitis B. This is a serious liver disease that is transmitted by exchanging bodily fluids. The infection is lifelong. The American College Health Association recommends that all College students be vaccinated against this disease.
- Skin cancer. Use sunscreen and keep your body covered when outside.
- Lyme Disease. There are a lot of ticks on Long Island, with increasing numbers in recent years. If you have a tick byte, get it checked out, and it you get the classical symptoms of Lyme disease, immediately get it checked out.
- Poison Ivy. You don't want to touch this plant. Even if, like me, you are not sensitive to it as sensitivity can be acquired. Leaves of three, leave it be. Google it to make sure you recognize it.
- Counselling and Psychological Services. https://www.stonybrook.edu/caps/ Do not be afraid to use these services! More details on Friday.
- Student Health Services: https://www.stonybrook.edu/commcms/studentaffairs/shs/
- Stay healthy. Practice moderation in all things, eat well, and look for ways to keep fit.

COVID-19

- Regardless of your vaccination status, **wear your face mask/covering** that covers your nose and mouth in *all* indoor public spaces, including classrooms, dining halls, libraries, residence hall lounges and public areas, etc., or outdoor spaces when you cannot maintain at least 6 feet of distance.
- **Get tested** for COVID based upon follow-up email communication you will receive from Stony Brook. Vaccinated students will participate in on-campus surveillance testing approximately once a month. Unvaccinated residents who received a limited exemption are required to test twice a week on-campus. Unvaccinated commuters are required to obtain a test off-campus once a week and need to submit their test results to the Wolfie Health Portal.
- **Wash your hands** regularly with soap and water.

- https://www.stonybrook.edu/commcms/strongertogether/latest.php

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Rest of the week

TODAY

11:00AM - 11:30 AM Guide to the Comprehensive Exam - Derek Teaney
11:30 AM - Student Offices - Samet Demircan

12:00 PM - 1:00 PM Lunch

1:00PM - 2:00 PM MA Students: Guide to the MA Program

2:00 PM-4:00 PM TA training: (Required for students who will be TAS, optional for others)

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Rest of the week

TUESDAY

9:00AM-1:00PM Comprehensive Exam: Classical Mechanics

WEDNESDAY

10:00AM-11:00AM Grad School Responsible Research Training
https://calendar.stonybrook.edu/site/graduate-school/event/new-grad-student-orientation-responsible-research/

1:00PM-5:00PM Comprehensive Exam: Electrodynamics

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Rest of the week

THURSDAY

Online Morning Session

9:00AM-10:00AM P&A Panel on Responsible Research

10:00AM-11:00AM Guide to Course Selections

11:00AM-1:00PM Course Introductions by Instructors

Afternoon Social Session organized by PGSA

FRIDAY

8:45AM-12:00PM TAs will present on Labs in A-117

12:00PM-12:45PM Lunch and move to S-240

12:45PM-1:30PM CAPS

1:30PM-1:45PM GSEU

1:45PM-2:15PM Title IX Training

2:15PM-4:00PM Mentor Program Kickoff

4:30 PM Friday Social in the Simons Garden

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Rest of the week

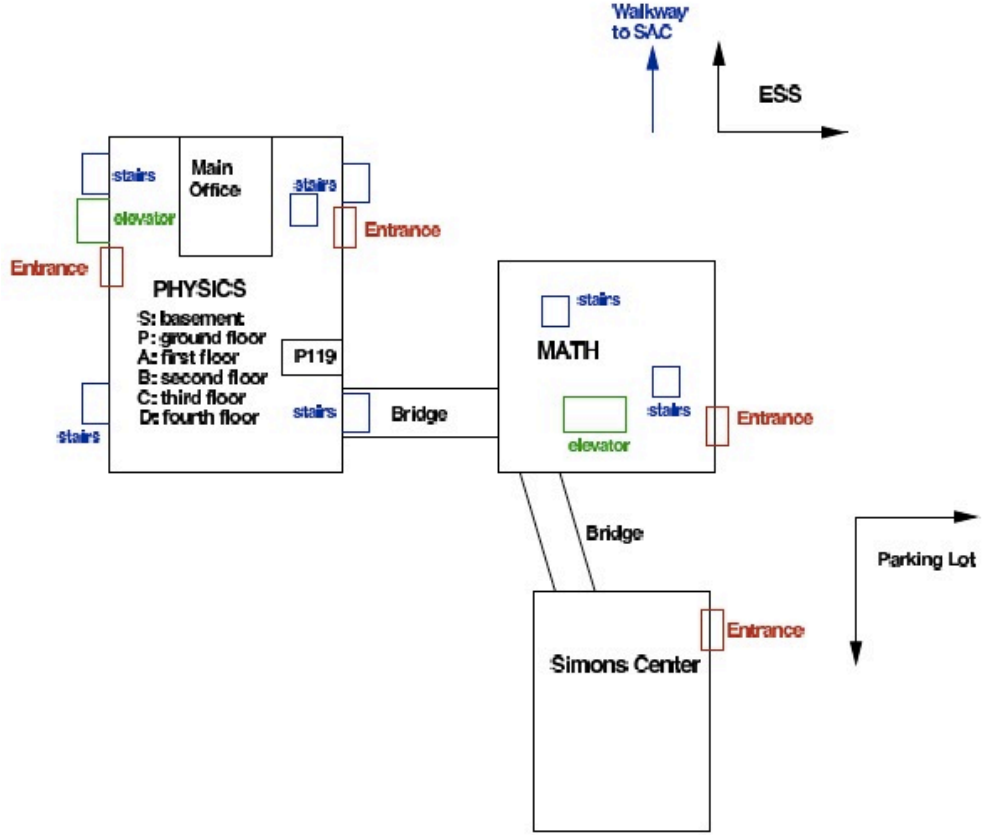
SATURDAY

9:00AM-1:00PM Comprehensive Exam: Quantum Mechanics

SUNDAY

9:00AM-1:00PM Comprehensive Exam: Statistical Mechanics

Map


Walkway to SAC
ESS
stairs
Main Office
stairs
elevator
Entrance
Entrance
PHYSICS
S: basement
P: ground floor
A: first floor
B: second floor
C: third floor
D: fourth floor
P119
stairs
stairs
Bridge
stairs
MATH
stairs
Entrance
elevator
Bridge
Parking Lot
Entrance
Simons Center