



Cornell University
Department of Physics

Welcome to Cornell Physics!

Welcome to the Cornell Physics Department! All of us here hope that your time at Cornell will be stimulating and enjoyable.

This booklet puts together information likely to be of use to incoming Physics graduate students. I think you will find it very helpful. If you have any questions after reading it, please contact me or Kacey Bray, who will be your guide for all administrative matters from now until your graduation. We will be happy to help you.

Upon your arrival at Cornell, you will be meeting many of the faculty, staff and older graduate students. I suggest that you build on these initial meetings by attending the Monday Departmental Luncheons and Monday Physics Colloquia throughout the year. These are both excellent opportunities to meet your colleagues, as well as faculty members, and to become involved in the intellectual and social life of the department.

We all wish you well and stand ready to assist in your busy and challenging first year.

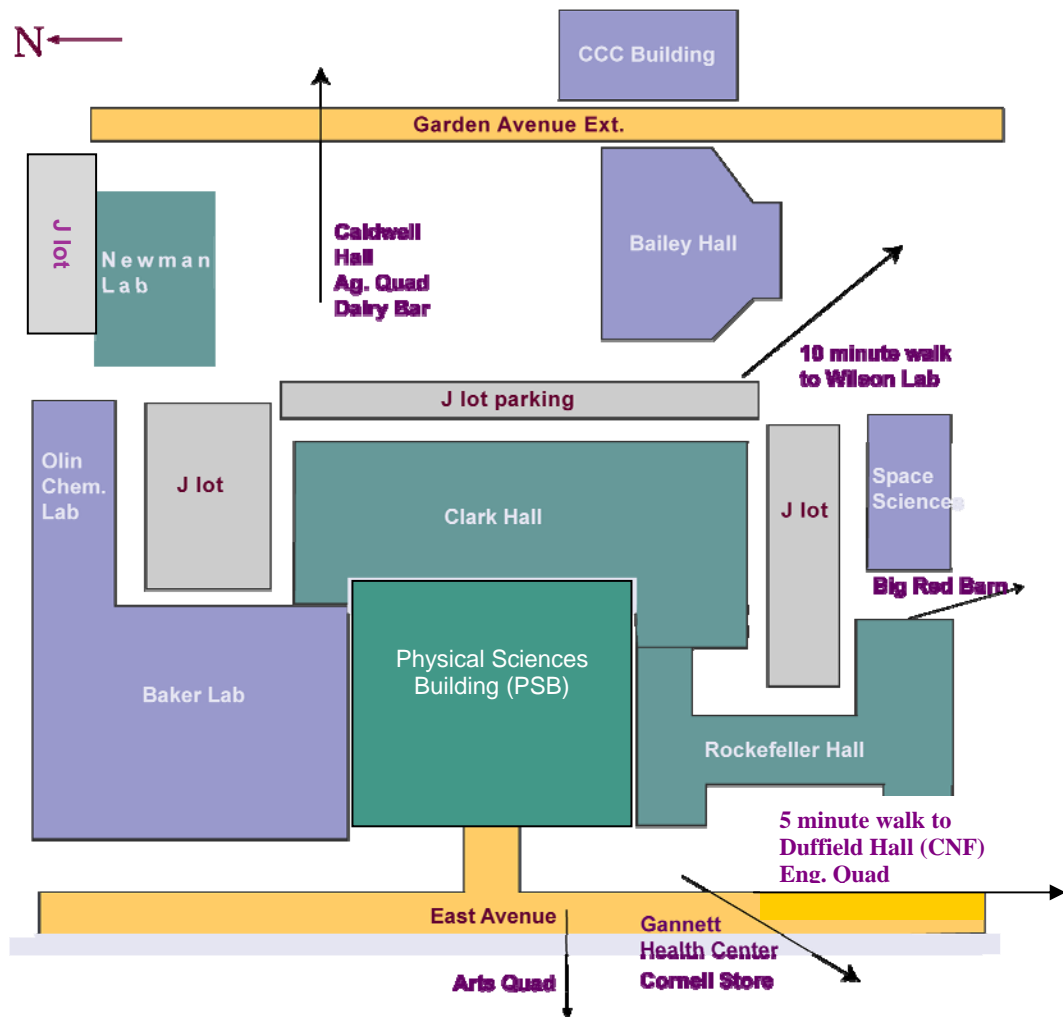
A handwritten signature in black ink, appearing to read "Jeevak Parpia".

Prof. Jeevak Parpia
Director of Graduate Studies

First Semester at - a - glance

Monday, August 8, 2011	Online course enrollment begins
Tuesday, August 9, 2011 – Wednesday, August 17, 2011	International TA Training (does not apply to all)
Monday, August 15 – Wednesday, August 17, 2011	Department check-in, 109 Clark Hall
Thursday, August 18, 2011	Physics Orientation (700 Clark Hall, 3:00 to 5:00pm) BBQ for all incoming Physics grad students (Urn Garden adjacent to Big Red Barn, 5:00pm)
Friday, August 19, 2011	TA Training (required for ALL incoming students!) (Schwartz Auditorium, Rockefeller Hall, 9:00am) PGS Dinner and activities (5:00pm)
Saturday, August 20, 2011	TA Training (105 Space Sciences, 9:00am) International Graduate Student Orientation (TBA)
Monday, August 22, 2011	Graduate School Orientation and University Registration (Barton Hall, 8:00am–1:30pm)
Tuesday, August 23, 2011	Course staff meetings (including TAs) (between 1:00pm and 5:00pm)
Wednesday, August 24, 2011	First day of classes.
Monday, September 5, 2011	Labor Day – no classes
Saturday, October 8 – Tuesday, October 11, 2011	Fall break – no classes Recess begins at 1:10 pm on Saturday, October 8 and instruction resumes 7:30 am on Wed., October 12
Wednesday, November 23 – Sunday, November 27, 2011	Thanksgiving break – no classes Recess begins at 1:10 pm on Wednesday, November 23 and instruction resumes on Monday, November 28, 2011 at 7:30 am
Saturday, December 3, 2011	Last day of classes for the fall term
Wednesday, December 7 - Friday, December 16, 2011	Scheduled final exams for the fall term

A Physicist's view of the world...



Rockefeller Hall - Classrooms, Schwartz Auditorium, TA Offices, Grad Computer Facilities

Clark Hall - **Basement:** Machine Shop, Vending Machines, LASSP Labs; **1st Floor:** Physics Offices, TA offices, Grad Lounge; **3rd and 4th Floors:** 510 Advanced Lab; **5th and 6th Floors:** LASSP Faculty Offices; **7th Floor:** Bethe Seminar and Conference Rooms

Newman Lab - SRF Facility, LEPP Administrative Offices

Wilson Lab - Cornell High Energy Synchrotron Source (CHESS), Cornell Electron Storage Ring (CESR), ERL development

PSB - **Basement:** LASSP labs, A&EP labs, Kavli Institute; **Ground level:** stockroom, LASSP labs, Chemistry labs, A&EP labs; **1st Floor:** atrium, department main entrance; **2nd Floor:** Chemistry; **3rd Floor:** LEPP faculty offices; **4th Floor:** LEPP & LASSP faculty offices, conference room, TA offices

Space Sciences - Astronomy, Astrophysics Faculty Offices

Baker Lab - Chemistry

Duffield Hall - Cornell National Nanofabrication Facility (CNF)

People you should get to know in the Physics Department

Administrative Staff

Prof. Ritchie Patterson (109 Clark Hall) ritchie.patterson@cornell.edu
Department Chair

Prof. Jeevak Parpia (608 Clark Hall) jeevak@ccmr.cornell.edu
Director of Graduate Studies

Prof. Erich Mueller(514A Clark Hall, 115 Clark Hall) physicsdus@cornell.edu
Director of Undergraduate Studies

John Miner (109 Clark Hall) jcm8@cornell.edu
Administrative Manager. Responsible for teaching assignments.

Deb Hatfield (109 Clark Hall) dah6@cornell.edu
Administrative supervisor. Assistant to the Chair and Administrative Manager.
Responsible for department records and processing of appointments.

Kacey Bray (117 Clark Hall) klb79@cornell.edu
Graduate Field Assistant and website administrator. Responsible for graduate admissions, physics website, department publications and graduate student records.

Christine Clay (117 Clark Hall) cmc439@cornell.edu
Undergraduate and Events Coordinator.

Rosemary French (121 Clark Hall) rjf2@cornell.edu
Course coordinator. Manages classroom and course scheduling, grading and course information, registration and enrollments. Responsible for textbook and desk copy orders.

Cindee Ball (117 Clark Hall) ccb27@cornell.edu
Primary duplicating operator. Responsible for mailroom, department bulletin boards, maintaining office supplies and course evaluations.

Nancy Searles (119 Clark Hall) nbs4@cornell.edu
Accounts, payroll, and purchasing coordinator.

Megann Seltzer (250 Rockefeller Hall) ms494@cornell.edu
Manages Physics 1101/1102 Testing Center.

Technical Staff

The Physics Department employs technicians who have specific responsibilities in the graduate and undergraduate courses. They are generally responsible for setting up and maintaining the equipment used in the teaching labs or in lecture demonstrations.

Dr. Phil Krasicky (B-9 Rockefeller) pdk4@cornell.edu

Teaching Support Specialist. Develops and enhances instructional laboratory experiments and lecture demonstrations for undergraduate physics courses, in consultation with faculty, instructors, and technical staff, effectively utilizing computers, technical programs, and web technology. Oversees technical staff in the production, fabrication, and implementation of experiments and demonstrations. Also serves as Senior Lecturer.

Nick Szabo (308 Clark) ns53@cornell.edu

Runs the advanced experimental teaching labs for physics seniors, Physics 4410, and for graduate students, Physics 6510. About eighty different experiments are available in a wide range of areas for students to choose from. The advanced labs are located on the 3rd and 4th floors in Clark Hall.

Vince Kotmel (B-27 Rockefeller) vwk1@cornell.edu

Provides technical support for the teaching labs in all of the introductory physics courses, including the undergraduate engineering sequences Physics 1112, 2213 and 2214, their counterparts for majors Physics 1116, 2217, 2218, and introductory courses offered to non-majors Physics 1101-1102, 2207-2208. The labs are located on the basement level and on the second floor of Rockefeller Hall. Additional support is provided for the electronic circuits course, Physics 3360, in Clark Hall. Also serves as the Rockefeller Building Manager, overseeing upkeep of the facility and the distribution of building keys.

Mark Lory-Moran (B-27 Rockefeller) ml622@cornell.edu

Provides technical support for the teaching labs of the physics courses in Rockefeller Hall, with main focus on the introductory course Physics 1101/1102 and the electronic circuits course Physics 3360. Also serves as the Assistant Building Manager to Rockefeller Hall as needed.

Jenny Wurster (202 Rockefeller) jew16@cornell.edu

Teaching support specialist for the large undergraduate physics lectures in Physics 1112, 1116, 1201, 2207, 2208, 2213, 2214, 2217 and 2218. Sets up and maintains the equipment used in the lecture demonstrations, most of which take place on the second floor in the south wing of Rockefeller Hall.

Before you arrive...

TRANSCRIPTS

It is a requirement that you have an official copy of your undergraduate transcript sent to the Graduate School Records Office, 143 Caldwell Hall. When you applied for admission while still an undergraduate, you sent an unofficial transcript or a transcript before you had finished your last semester and completed your degree requirements. The Graduate School will not award an advanced degree without a transcript showing the award of an undergraduate degree and it may also prohibit you from registering for courses.

You will also need to bring Kacey Bray (117 Clark Hall) a copy of your final transcript, so that we can keep it on file in the Physics department.

When you arrive...

PHYSICS DEPARTMENT CHECK – IN

1. Complete Employment Paperwork.

We are requesting that all new graduate students check-in with the Physics Department on either Monday, August 15- Wednesday, August 17. All new graduate students will need to present original identification documents to Deb Hatfield in 109 Clark Hall in order to complete an Employment Verification (I-9) form. Identification documents may include a Passport or Social Security Card and Driver's License. International students will also need their I-20 and I-94 forms. J-1 visa holders must report to the International Students and Scholars Office, B-50 Caldwell Hall, to complete this form. A copy must then be brought back to Deb for her records.

The Immigration Reform and Control Act of 1986 created a national employment verification system which places responsibility for verification of the identity and employment eligibility of all employees on the employer. This law requires employers to request and examine documentation of identity and employment eligibility of all new hires and rehires, including U.S. citizens, permanent residents, and non-immigrant visa holders.

2. Get your office assignment.

All first-year graduate students, and others involved in undergraduate teaching, are assigned office space in Rockefeller Hall or Clark Hall. Assignments are made by Deb Hatfield upon your arrival. You will receive this information from Deb when you check-in.

All TA offices have telephones. The lines are restricted to campus and local use. We recognize the need for our TAs to be able to contact students, faculty, etc., but hope you will keep your outside calls brief. Campus calls are free, but we are charged by the minute for local calls and would appreciate your assistance in trying to keep costs down. Long distance toll calls cannot be made from these office phones. However, it is possible to make calling card calls and collect calls from these office phones by dialing 9, then 0-(area code)-(number). Please do not accept any collect calls to your office telephone.

A note about office upkeep: The building custodians should be cleaning each office at least once a week (i.e., dusting, mopping, vacuuming) and emptying waste baskets daily. (Note that there are two wastebaskets for each office—one for recyclable paper and the other for non-recyclable material.) Custodians are instructed not to move personal items (newspapers, radios, clothing, soda cans, etc.). They can only clean where things are picked up. Also note that blackboards will be washed only if they are erased.

3. Pickup your keys.

The key for your mailbox in 117 Clark Hall and for the grad lounge (125 Clark) may be obtained from Deb Hatfield in 109 Clark Hall. All other Clark Hall and PSB room keys can be obtained from David Bowman, G-28 Clark Hall. Rockefeller Hall keys can be obtained from Vince Kotmel in B-27 Rockefeller. A \$5 deposit is required for these keys and is refundable when the key is returned.

INTERNATIONAL GRADUATE STUDENTS

1. Check-in with ISSO.

All international students MUST report to the International Students and Scholars Office (ISSO), at B-50 Caldwell Hall, within 30 days of the start date on their I-20. Bring your passport, I-94 card and I-20. For more information and assistance visit www.isso.cornell.edu/students/comingtocornell.php or call (607) 255-5243.

2. Social Security Number

All students must have a United States Social Security number if they are employed, including as a TA or GRA. You may apply for a social security card at the local Social Security Administration office, 127 West State Street, 2nd Floor, Ithaca, NY, (607) 256-3651. For further information please visit www.isso.cornell.edu/students/ssnfl.php.

3. International Teaching Assistant Summer Program

The International Teaching Assistant (ITA) summer program is designed for teaching assistants whose native language is not English. This mandatory summer program introduces new international TAs to the culture of U.S. classrooms and Cornell University and provides opportunities for them to develop their teaching skills. Those who are required to participate will receive a \$500 stipend. If you are required to attend, you have already been notified. The tentative schedule is as follows:

August 9	Program Orientation and Breakfast
August 9 & 10	Language Assessment
August 10	General sessions for all participants
August 11-12 & 15-17	ITA Program Sessions and Individual Conferences
August 17	Closing Event

More information can be found at: www.cte.cornell.edu/campus/itadp/summer.html

4. International Graduate Student Orientation

A welcome to new international students (by the International Students and Scholars Office) will be held on the afternoon of Saturday, August 20. The program will feature faculty, staff and fellow graduate and professional students from across the university, providing information and advice for new students on university policies, academic life, immigration requirements, health and safety. The time and location will be announced later and will be posted at www.isso.cornell.edu.

PHYSICS ORIENTATION DAY – THURSDAY, AUGUST 18

Thursday, August 18, 2011, is devoted to orientation activities. At 3:00pm, there will be an academic orientation meeting in 700 Clark Hall for new Physics grad students. This will include both general information about the program and a summary of each of the courses likely to be of interest to first-year grad students. You are expected to attend.

At 5:00 pm, following the physics orientation, there will be the traditional barbeque for new Physics graduate students outside the Big Red Barn just southeast of Rockefeller Hall. Come have dinner and meet continuing graduate students, faculty, and staff of the department.

PHYSICS TA TRAINING PROGRAM – AUGUST 19 AND 20

A workshop to help new physics graduate students prepare for teaching duties, lead by experienced teaching assistants, will be held on Friday, August 19 and Saturday, August 20. Work in the following week will focus on specific needs of the particular course you are assigned. This is a mandatory training for all new graduate students, regardless of funding. Exchange and non-degree students are encouraged to attend, but not required.

UNIVERSITY REGISTRATION AND GRADUATE SCHOOL ORIENTATION

VERY IMPORTANT! University Registration for new graduate students takes place on Monday, August 22, 2011 from 8:00am to 1:30pm in Barton Hall. This process registers you as a Cornell student, but does NOT enroll you in specific courses. Various campus offices and organizations will share information about their programs, activities and other valuable resources.

Please check the Graduate School website for more orientation events and activities, www.gradschool.cornell.edu.

COURSE ENROLLMENT

Graduate course enrollment begins on Monday, August 8. Course enrollment traditionally lasts for three weeks. You can find information and instructions for enrolling in courses at www.registrar.sas.cornell.edu/student/enroll.html.

The fall 2011 course and time roster is available at: www.registrar.sas.cornell.edu/courses/Roster/FA11/

IDENTIFICATION (ID) CARDS

ID cards for new graduate students will be available for pick-up at registration on August 22. Entering students will have access to the libraries, bus and other services that require ID cards beginning on August 22. Students who arrive on campus after registration can obtain ID cards Monday – Friday, 8:00 am – 4:30 pm, in B-7 Day Hall. There is a fee of \$40 to replace lost cards.

NETWORK ACCOUNT

Your Network Identity (NetID) is a personal, unique identifier assigned to every member of the Cornell community. You need a NetID and password to use Cornell's network services (e-mail, access to grades, on-line course enrollment, the web, etc.). Your network ID is also your e-mail address (NetID@cornell.edu). New students should have received their NetID and activation code in April from Cornell Information Technologies (CIT). If you have not activated your NetID yet, please do so now.

Students who don't receive their NetID before they arrive on campus, or during registration, should stop by the CIT HelpDesk, 119 Computing and Communications Center (CCC) or call (607) 255-8990. Students must have a valid Cornell ID to get a NetID.

STUDENT CENTER

Student Center offers a way to access your information 24 hours a day, 7 days a week from your computer. It's a suite of services that allows you to update your addresses, verify your registration status and schedule for the current term, look at your grades, review your bursar and Cornell Card accounts, look at your financial aid records and enroll in classes.

You will need your Network ID and password to access these services. You can access Student Center services through the website <http://studentcenter.cornell.edu>.

BURSAR BILL

Students holding a Teaching Assistant position in the Physics Department will have their tuition and student health insurance paid for by the Department. The paperwork is done ahead of time and the tuition charge (\$14,750 per term) and health insurance charge should not appear on your bill. If either does, DO NOT WORRY! Let Deb Hatfield (109 Clark Hall or dah6@cornell.edu) know. Students holding fellowships that are administered by the Graduate School will have tuition and health insurance paid by the Graduate School. Please contact the Graduate School if there are discrepancies.

Any other fees that students are responsible for, i.e. student activity fee or Cornellcard, will need to be paid in person to the Bursar's Office at 260 Day Hall or using Net.Pay, by the due date. To sign-up for e-billing with Net.Pay, go to

www.dfa.cornell.edu/dfa/treasurer/bursar/studentsparents/paying/netpay/index.cfm. After the due date, a finance charge will be added to the bill. Graduate students are charged on their bursar's bill a student activity fee of \$38 per semester to support student activities under the auspices of the Student Assembly. This fee is not included in fees covered by the department or Graduate School.

The student activity fees are collected to support a variety of student-related events and activities. About half of the fees go toward funding the Cornell Concert Commission, the Cornell Cinema and the Cornell University Programming Board Lecture Fund. The remainder of the fees are given to various graduate student organizations on campus for social events and other student-related activities, i.e. grad dances, happy hours for grads, etc. This includes the Physics Graduate Society (PGS).

For further information about billing and payment dates go to www.dfa.cornell.edu/treasurer/bursar/. For questions about your bill, please use the contact information provided on your bill or contact uco-bursar@cornell.edu or 607-255-2336.

PAYCHECKS

For students who are appointed in the Physics Department as Teaching Assistants or Graduate Research Assistants, your first paycheck will be issued to you on Wednesday, August 31. If you are not enrolled in the Direct Deposit program, your paycheck will be mailed to you. Please check in your Student Center that you have listed the correct local address. Paychecks are issued bi-monthly, usually on the 15th and the last day of each month (30th or 31st).

Cornell offers direct deposit of your Assistantship paycheck to banks based in the U.S. You can learn more about direct deposit, and obtain the form at <http://www.dfa.cornell.edu/payrollservices/services/directdeposit.cfm>. You should complete the form and return it with a voided check or form from your bank to the Cornell University Payroll Office, 377 Pine Tree Road, Ithaca, NY 14850, to set up your direct deposit.

For students holding a fellowship, Cornell is requesting that you sign up for direct deposit of your stipend via Net.Pay. To enroll go to <http://www.dfa.cornell.edu/dfa/treasurer/bursar/services/directdeposit.cfm>. Fellowship stipends are

issued in one lump sum payment, at the beginning of each semester. For students whom direct deposit is not possible, checks will be in the Bursar's Office after Monday, August 22.

TAXES

Graduate students with assistantships or fellowships must file a federal income tax return and generally must also file a New York State income tax return. All students should complete a W-4 form, Employee Withholding Allowance Certificate online at www.dfa.cornell.edu/dfa/payrollservices/services/w-4-self-service.cfm . For questions regarding this form, call 607-255-5194.

All foreign nationals who receive payments from Cornell University, other than travel reimbursement and honorarium, will be required to complete the online Foreign National Questionnaire through the Foreign National Information System (FNIS). The information provided through FNIS will be used to evaluate your U.S. tax status, i.e., eligibility for exemption from income of FICA taxes, etc. To gain access to FNIS, you must obtain a user name and password by sending an e-mail message with "Request for user name and password" in the subject line to cu_fnis@cornell.edu.

For more information visit www.dfa.cornell.edu/tax/foreign/forms/questionnaire.cfm

The International Students and Scholars Office has tax software available to all Cornell, non-resident, international students for filing U.S. Federal Tax Forms. For more information see www.isso.cornell.edu/tax/tax.php . The due date for filing taxes is April 15, 2012.

SPECIAL COMMITTEE SYSTEM

With this mailing, the Director of Graduate Studies sent your assigned Special Committee. This Committee is made up of three professors in Physics who serve as your advisors. We try to place you with a committee chair that relates to the interests indicated on your application to Cornell.

Upon your arrival, you should meet with each member of your Special Committee to discuss your plans and interests and to go over your schedule for the fall term. Your committee determines with you an appropriate program and judges your performance in exams.

You are free to change your committee, however, there are guidelines that must be followed and you must receive DGS approval. The committee must be formally changed by requesting this change in your Student Center, however, most students keep their initial committee until after their qualifying (Q) exam.

FORMS

Over the course of your study here, there will be forms that you will need to fill out and have signed by your Special Committee, the Director of Graduate Studies (DGS) and the Graduate Field Assistant (GFA). These forms include, but are not limited to Schedule of Exam, Results of Exam, Conference Travel Grants and Petition forms.

Any form that needs the DGS and/or GFA signatures should be left with Kacey Bray in 117 Clark Hall. The DGS will stop by that office to sign forms. Once the form is signed, Kacey will make a copy for the department records and return the original form to your mailbox. You will then need to take the signed form to the Graduate School. Many forms have submission deadlines.

You can download Graduate School forms and instructions at: www.gradschool.cornell.edu/forms You may also obtain copies from Kacey Bray in 117 Clark Hall.

RESEARCH VISITS

During the first year, new graduate students are expected to visit at least three professors whose research interests them. Visiting can involve either attending a professor's group meeting, usually held weekly, or meeting one-on-one. Group meeting schedules will be posted at <http://www.physics.cornell.edu/graduate/resources-for-grad-students/research-group-meeting-schedules/> in the fall. Be sure to email the professor to check on the time of a meeting you want to attend, as these meetings are subject to last minute changes. Other good ways of exploring research possibilities include attending colloquia and seminars and participating in special research opportunities events held by the department each fall.

Information for Teaching Assistants

TA ASSIGNMENTS

Most incoming graduate students in physics hold teaching assistantships. These are useful in three ways: 1) in supporting the physics teaching program by leading discussion sections and interacting closely with undergraduate students, and by providing the students with a different perspective, personality and teaching style; 2) in furthering graduate education by providing meaningful work, strengthening understanding in the subject area and by providing training as physics instructors and speakers through real-life teaching experiences; and 3) in providing financial support for graduate education through the payment of stipends, tuition and health insurance.

An attempt is made to place TAs in courses that they would prefer to teach while considering other important factors such as experience, special training, past performance and language ability. Ultimately, the top priority is to position instructors in all of our courses to best serve the needs of the undergraduate students.

The process for assigning TAs to specific courses begins in early summer, and most of the fall assignments can be firmed up by mid-August, but a few take longer. Occasionally changes must be made to accommodate course enrollment shifts, or other last minute surprises. John Miner, the department's administrative manager, makes the assignments in consultation with the Director of Graduate Studies. Please stop by 117 Clark to meet John and to discuss your teaching assignment between Monday, August 15 and Wednesday, August 17. You may set-up an appointment to do this with Deb, when you check-in.

TAs are notified by email or memo concerning which course they will be teaching, when staff meetings will be held, who is in charge of the course, and other pertinent information. Initial staff meetings (including TAs) will be held Tuesday, August 23. TAs should contact the professor in charge of their course if they have specific questions. Expect to spend some hours going through the laboratory exercises and preparing for teaching.

A full TA workload should be up to 20 hours per week although some inexperienced TAs may take a few weeks to learn how to improve their efficiency. Full TAs will earn a 9-month stipend, \$24,248, plus tuition and university health insurance coverage. If you feel that your teaching responsibilities are becoming overwhelming or taking too much of your time, please stop by to speak with John Miner.

Important! You should plan to be in Ithaca through the final exam period (December 16, 2011) and confirm with the senior staff member of your course when your obligations will be fulfilled. TAs for the spring 2012 semester should be back in Ithaca no later than January 16, 2012 (classes begin on January 23), in order to prepare and to attend organizational meetings for the course you will TA in the spring.

Students admitted to the graduate program with TA support should plan on teaching for the first two years. A student who finds support as a GRA during the first two years may request to be released from teaching. The request will be granted on a semester-by-semester basis if they are not needed to teach, which is often (but not always) the case. The request should be made to John Miner at least one month before the start of the semester.

A NOTE TO TAS REGARDING COURSE EXCHANGE (COURSE ADD/DROP)

If you are assigned to teach discussion sections, some students in your section may plead with you to allow them to switch sections, or approve their switch into your section. Regardless of how compelling their arguments may be, you cannot approve this request. You **MUST** refer them to Rosemary French (121 Clark Hall) who keeps all course records. Section enrollments are controlled by the add/drop online process. Unofficial section switching is not allowed. If a student needs to switch into a section that is currently full, Rosemary will deal with that situation. *We depend upon your cooperation in this matter. Thank you!*

GRADUATE TA DEVELOPMENT WORKSHOPS

The Center for Teaching Excellence (CTE) sponsors Graduate Teaching Assistant Excellence Series brown bag discussions and workshops for graduate students who are or will be employed as teaching assistants at Cornell. The series provides a forum through which TAs can explore and discuss a variety of topics related to teaching in higher education in order to improve their teaching at Cornell and in their possible future careers as faculty members.

Please visit www.cte.cornell.edu/tap/gradseries.html for the schedule and more information.

PHOTOCOPYING FOR TAS

Teaching assistants typically teach two discussion sections, or about 40 students total. For duplication of weekly handouts, problem sets and quizzes for sections, the main office (117 Clark Hall) has a Canon copier. Please come in and introduce yourself to Cindee Ball. She will familiarize you with the machine so that you'll be able to use it when you begin teaching sections. You are not permitted to use another copy machine in the building and charge the copies to Physics. There are also a paper punch, paper cutter and other supplies available for your use, just ask. The occasional personal copy is allowed at \$.10 per page. Please don't overuse the copier for personal use.

The large Konica machine in the back room is used for large quantity duplication of lab manuals, exams and handouts for the large courses. This equipment is to be used by the Physics office staff **ONLY**. If the Canon copier is out of order, please see one of the office staff members.

DESK COPIES

Desk copies of textbooks will be ordered for the courses you have been assigned to TA. Desk copies for all Physics courses can be obtained from Rosemary French in 121 Clark. You must return all desk copies to Rosemary when you are finished teaching the course. You will receive a memo reminding you to return the desk copies near the end of the semester.

Direct any questions regarding textbooks to Rosemary French, at rjf2@cornell.edu.

GRADING

Some courses are staffed with graders. While grading positions do not cover tuition, they are open to graduate students and are a way of supplementing a TA or GRA stipend. The Grader stipend is \$2305 per semester for 7 to 8 hours of work each week. Contact the Director of Graduate Studies if you are interested. Grading is not recommended for 1st year students.

Important Resources and Facilities

THE PHYSICS DEPARTMENT OFFICE

The Physics Office (117 Clark Hall) is open from 8:00 am to 4:30 pm Monday – Friday. If you are a TA, this is where you will come to pick up supplies, make photocopies and pick up your mail.

In the hallway outside of the main office, we have a board with pictures of the entire faculty and staff and another with all current graduate students, to help you get to know the people you'll be working with in the coming years.

If you have a question about something, feel free to ask one of the staff. We will do our best to assist you.

MAIL

Grad student mailboxes are located in the main office, 117 Clark Hall. Each of you has an assigned mailbox. The boxes are in alphabetical order. The correct mailing address for your mail is Physics Department, Cornell University, 117 Clark Hall, Ithaca, NY 14853.

PLEASE HAVE YOUR PERSONAL MAIL AND PACKAGES SENT TO YOUR APARTMENT OR OFF-CAMPUS ADDRESS. DO NOT HAVE IT SENT TO YOUR PHYSICS MAILBOX.

There are only one or two people available to sort both U.S. and campus mail for all residents and departments in Clark Hall and Rockefeller Hall. We simply do not have enough staff to sort incoming personal mail for our grad students, nor do we have the storage space. Please be considerate to our staff, and have all your personal mail delivered to your home address, including packages, monthly publications, and scientific journals. We also ask that you not use your mailbox as a “storage file”. Please empty your mailbox and take care of your mail on a regular basis. You are expected to notify correspondents of your new address. Campus mail is delivered and picked up at approximately 8:00 am and 12:00 pm each day. U.S. mail is usually delivered and picked up sometime between 2:00 pm and 4:00 pm daily. It can take one to two hours to sort into individual mailboxes. The mail slots for campus and U.S. outgoing mail are located in the hallway outside the main office. Outgoing U.S. mail must have the proper postage before it is put in the box.

You will need a key to open the door to your mailbox after office hours. The same key will give you access to the Graduate Lounge located in 125 Clark Hall. Please see Deb Hatfield in 109 Clark for this key.

GRADUATE LOUNGE

The Grad Lounge is located in 125 Clark Hall. All Physics grad students will have a key to the Lounge (same as the mailbox key). We hope you will use and enjoy it. The lounge has tables and chairs and it is there for socializing, relaxing and studying. There is a microwave available if you choose to have lunch there. This is also the location of the weekly PGS Coffee Hour. Please be considerate of others and always clean up after yourself in the lounge.

PHYSICS GRADUATE COMPUTING FACILITY

As an incoming physics graduate student, you will benefit from our Physics Educational Computing Facility, which is based on Ubuntu Linux and is located in Rockefeller Hall room B3 (in the basement, near most of your offices).

The facility provides you with general computing access for e-mail, web browsing, and document preparation, and establishes a uniform scientific computing environment of well-maintained, current, standardized software tools to support coursework, teaching assistantships, and research.

As a general rule in the world of Linux there are many software packages for any particular task you may need, giving you the freedom to choose the one that you like best. A complete suite of scientific and numerical software is available, as well as development tools for a variety of languages. If a program you need is not available, just contact the system administrator at help@physics.cornell.edu to have it installed.

In addition to the documentation available in electronic form in the facility and online, there is a library of printed books and manuals on the Linux operating system and the most important software packages. It is located at the entrance of B3.

Please save paper as much as possible when working in this facility, since there is only a limited amount purchased for this purpose each year. Be conservative with what you actually need to print. Do not reuse paper in the printers since this tends to cause jams. If the printers run out, you can get more paper from Cindee Ball in 117 Clark Hall. There is a special supply bought for this room, so please don't simply take it off the shelves in the main office.

The facility is remotely accessible via secure shell (SSH) access at secure.physics.cornell.edu, or you can connect directly to a specific machine through nws##.physics.cornell.edu (## between 01 and 22).

At the start of the semester, you will automatically be assigned an account (login name: <first initial><last name>; example: jdoe), which will also serve as your email address (example: jdoe@physics.cornell.edu). You can read this email remotely with your own mail reader using IMAP, or on the web at <http://webmail.physics.cornell.edu>. We recommend however that you forward your mail elsewhere by placing an email address into the .forward file in your home directory, rather than storing it locally. In the future the email service will be only for forwarding.

The computing facility system administrator is graduate student Kristofer Henriksson, and the faculty advisor is Professor Jim Sethna. Additional information concerning the facility is available at <http://computing.physics.cornell.edu>, and further questions may be directed to help@physics.cornell.edu.

EDNA MCCONNELL CLARK PHYSICAL SCIENCES LIBRARY

<http://physicalsciences.library.cornell.edu/>
pslref@cornell.edu

Dianne Dietrich, Physics & Astronomy Librarian
dd388@cornell.edu, 255-4016

Leah Solla, Chemistry Librarian
lrm1@cornell.edu, 793-6217

The Clark Physical Sciences Library, named in honor of Edna McConnell Clark, provides access to scholarly literature and information sources in astronomy, chemistry, and physics for the Cornell community. Subject librarians are located in 283 Clark Hall, and provide services and support for faculty, students, and staff, including reference, research consultations, instruction on specific resources, research data management and publishing support. Students are welcome to contact the librarians directly with any questions they might have.

The online Physical Sciences collection is available at <http://physicalsciences.library.cornell.edu/>. Over 90% of the current journal subscriptions and most of the back issues are available electronically. Online reference materials include physical properties, crystallographic data, Web of Science, INSPEC, SciFinder, and an expansive e-book collection. The website also includes links to tools for making the most of the online collection, including off-campus access and citation management.

Print materials are available at several Cornell libraries, including the Mathematics Library in Malott Hall, Uris Library, Mann Library, and the Library Annex storage facility. Articles in the Annex can be requested for 24-hr scan, and books can be requested for delivery at any campus library. Graduate students have a six-month loan period for books. Course reserve items are available at the circulation desk at the Mathematics Library. A complete listing of all of the hours of Cornell libraries can be found at <http://www.library.cornell.edu/hours/>.

Helpful Resources:

7 Ways To Be A More Efficient Physicist - <http://guides.library.cornell.edu/7ways/>

Library Information – <http://guides.library.cornell.edu/physgrad/>

THE GRADUATE AND PROFESSIONAL STUDENT ASSEMBLY (GPSA)

The Graduate and Professional Student Assembly is the student government for graduate students at Cornell. The Council of Representatives is composed of a representative from each of the majors within the Graduate School. From this Council a total of 18 people are elected to serve on the actual Assembly which is the voting body of the student government. One of the primary responsibilities of the GPSA is to set the Graduate Student Activity Fee, which is used to fund campus activities. The GPSA sponsors social events that are open to all graduate and professional students; is active in lobbying the administration to improve pay and benefits for graduate and professional students, including stipend levels, insurance coverage, quality of health care services, and child care facilities; and provides unparalleled support for campus programming sponsored by graduate and professional student organizations. The GPSA is a member of the National Association of Graduate and Professional Students, which is particularly active in lobbying Congress on behalf of graduate and professional students.

The current representatives for the Field of Physics are Yan-Jiun Chen and Jolyon Bloomfield. You can find more information at: www.assembly.cornell.edu/GPSA/.

THE PHYSICS GRADUATE SOCIETY (PGS)

Welcome to the heart of your Cornell physics family: the Physics Graduate Society (PGS).

Kathryn McGill, President

Veronica Pillar, Vice President – Activities

Nathan Mirman, Vice President – Communications

Robert De Alba, Treasurer

We exist to further the professional and social interests of the physics grad students at Cornell.

You will be receiving emails from us throughout the year detailing the various events we host. However, to give you an idea of what to expect, here are a few of our recurring activities:

- II. Lunch/dinner meetings with visiting scientists.
- III. Truth Week, consisting of discussions and lab tours with senior grad students to assist you in finding a research group.
- IV. Monthly game and/or movie nights.
- V. An event so popular that the emails announcing it are considered by some to be their own event: the weekly PGS coffee hour.

All incoming students were assigned two grad mentors who are available via email.* Please email your mentors with any concerns you have about moving to Ithaca or starting grad school; they volunteered for the position and are happy to help. You will meet your mentors at a welcome barbeque in the fall.

PGS is here to help make your graduate experience more enjoyable. If you have ideas for activities, want to find out about the extracurricular habits of other Cornell physics grads, or have questions about dealing with your first year of grad school, please email the PGS executive committee at pgs_exec-list@cornell.edu. You can also find information at www.physics.cornell.edu/pgs/. We can't wait to welcome you in person in the fall!

*If you have not yet received an email from your grad mentors, please email Kathryn at klm274@cornell.edu.

GRADUATE WOMEN IN PHYSICS (GWP)

Graduate Women in Physics was founded in 2005 with the purpose of bringing women graduate students together under the context of a common interest, which is physics. Through social events, the discussion of related issues and increased exposure to mentors in the field we hope to enrich the graduate experience of women in physics and associated fields. Typical activities include monthly lunches, dinners with female colloquium speakers, panel discussions with female faculty and staff and social activities such as movie nights, hiking and rock climbing. Group members include female graduate students in Physics, Astronomy and Applied and Engineering Physics. Funding for the group comes from these departments as well as from the GPSA.

THE BIG RED BARN (GRADUATE & PROFESSIONAL STUDENT CENTER)

The Big Red Barn Graduate and Professional Student Center offers graduate students a place to meet informally, relax or attend programs aimed at enhancing social, cultural and intellectual exchange. The center has breakfast and lunch meal service from 8:00am to 2:00pm. A number of graduate organizations hold their regular meetings at the Barn and many more sponsor special events. The very popular weekly social hour TGIF (Tell Grads It's Friday), International Coffee Hour, dance nights, family programs and special events all combine to provide grads and others with social and intellectual diversion.

More information about the Big Red Barn can be found at: www.gradschool.cornell.edu/life-cornell/big-red-barn

Physics Department Weekly Events

MONDAY LUNCHEON

The Physics Department Monday Luncheon is a long-standing tradition. The purpose of Monday Lunch is to give graduate students, postdocs, and faculty a chance to meet informally and to hear about and

discuss current department activities. It takes place every Monday during the academic year in 401 PSB at 12:00pm. Attending regularly is a great way to stay in touch with the whole of the Physics community. Lunch items will be available to purchase from 12:00pm to 12:45pm or you may bring your own lunch. Announcements and any presentations begin at 12:45pm.

COLLOQUIA AND SEMINARS

The general Physics Colloquium will be held every Monday at 4:00 pm in Schwartz Auditorium, Rockefeller Hall, during the fall and spring terms and you should plan on attending them. Guest speakers come from diverse fields within physics, and occasionally from fields outside of physics. Although the Colloquium is publicized throughout the campus, talks are usually directed at the level of first-year graduate students in physics. Refreshments are available before the Colloquium, from 3:30-3:50 pm, on the second floor landing outside of Schwartz Auditorium. Come early, as refreshments are not allowed in Schwartz Auditorium.

The Physics Department publishes a weekly bulletin during the academic year entitled, Colloquia and Seminars - Physics and Related Fields, which lists seminars from chemistry, engineering and other sciences as well as physics for the following week. The bulletins are available at: www.physics.cornell.edu/events/. All posted seminars and colloquia are open to all students.

Anything else you need to know?

Cornell Daily Sun – Available Monday through Friday during the academic year.

<http://cornellsun.com>

Ithaca Journal -- Ithaca's daily newspaper. Available in the morning.

www.ithacajournal.com

Ithaca Times -- Contains activities going on in Ithaca and surrounding areas.

www.ithacatimes.com

Cornell Chronicle -- Contains campus activities & events, news, research and university programs.

www.news.cornell.edu/

Life at Cornell

www.gradschool.cornell.edu/life-cornell

CUInfo

www.cuinfo.cornell.edu

Physics Department web pages

www.physics.cornell.edu

Physics Graduate Computing Facility Information

<http://computing.physics.cornell.edu/>

Courses of Study Catalog

<http://courses.cornell.edu>

Course and Time Roster

<http://registrar.sas.cornell.edu/courses/roster/FA11/>

Graduate School

www.gradschool.cornell.edu

New Student Info.

<http://newstudents.cornell.edu/grad/>

CIT Technology Services for Students

www.cit.cornell.edu/for/students.cfm

International Students and Scholars Office (ISSO)

www.isso.cornell.edu/

Center for Teaching Excellence

www.cte.cornell.edu

Cornell University Gannett Health Services

www.gannett.cornell.edu/

Cornell University Police

www.cupolice.cornell.edu/

Tompkins County and Ithaca Visitors' Bureau

www.visitithaca.com/

We hope that this booklet has been helpful.

**If you have further questions, feel free to stop by the
Physics Department main office or email your questions to
physics@cornell.edu.**