



Professor Anne Green

Head of School

School of Physics, A28
Telephone +61 2 9351 2537
Facsimile +61 2 9351 7726
Email: hos@physics.usyd.edu.au
<http://www.physics.usyd.edu.au>

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INFORMATION FOR NEW POSTGRADUATE STUDENTS

Welcome to the School of Physics

I hope that you will find the School an inspiring work environment and that you will enjoy your time here. This information pack includes information on various processes within the School, which will hopefully make your transition to the School environment a quick and simple one.

The School of Physics is a department within the Faculty of Science, which in turn is located within the Faculties of Science, which incorporates the faculties of Veterinary Science and Agriculture, Food and Natural Resources. The School has computational, experimental, observational and theoretical expertise in research areas that include applied physics, astronomy, astrophysics, biological physics, biophysics, brain dynamics, high energy physics, materials science, medical physics, optics & photonics, physics education, plasma physics, space & solar physics, sustainable energy, theoretical physics and wave physics. The School hosts the Centre for Waves and Complex Systems, the Sydney Institute of Astronomy (SIFA), the Centre for Integrated Sustainability Analysis (ISA), the Institute of Photonics and Optical Sciences (IPOS), the Institute of Medical Physics, the Institute of Applied Nuclear Science and the Centre of Excellence for Ultra-high bandwidth Devices for Optical Systems (CUDOS). Members of the School also belong to various centres based outside the University, including the Brain Dynamics Centre and the Centre for Quantum Computing.

The School of Physics operated one of the first computers in Australia (SILLIAC, 1956) and subsequently the Basser Department of Computer Science emerged from the School, becoming ultimately the School of Information Technologies (now in the Faculty of Engineering and Information Technologies). The School continues this nurturing of new disciplines via its contribution to the establishment of Vislab (initially based in the School but now in the School of Information Technologies), the Optical Fibre Technology Centre (closed on 31 December 2008, with most staff transferred to Physics), and the Key Centre in Microscopy and Microanalysis. The School also runs two world-class telescopes, one at optical wavelength (Narrabri) and the other at radio frequencies (Molonglo), and has close contact with the various national observatories. Our researchers obtain time on a variety of international instruments. Academics from the School also play a role in the fundamental particle physics program at CERN in Geneva, and with the HI-heliac national plasma facility at the ANU.

There are about 22 teaching and research staff in the School. As well there are over 80 research-only staff, including a number holding prestigious fellowships, most notably our five Federation Fellowships (Professors Marcela Bilek, Ben Eggleton, Peter Robinson, Bryan Gaensler and Joss Bland-Hawthorn). Academic staff are supported by about 40 general staff (IT, technical, laboratory, student support and administration), 10 adjunct and about 90 honorary academic staff.

We are one of the few big schools of Physics in Australia, and have been outstandingly successful in obtaining nationally competitive research grants to support our research programs. These vary from basic research to collaborations with industry, most significantly in the areas of brain waves and materials science.

The School is located in a central position on the main campus at Camperdown (the Annex and Physics buildings on Physics Rd). It is within easy walking distance of several lunch outlets, newsagencies, a post office, most major banks, health, dental and ophthalmic services. In addition, the University has two sports centres with a wide range of sports and gym equipment available, including tennis and squash courts.

Science Foundation for Physics

Affiliated with the School of Physics is the Science Foundation for Physics, which exists to support the School in a variety of ways, and to promote science in the wider community. The Science Foundation funds undergraduate scholarships and gives the School a grant up to \$100,000 each year to fund strategic initiatives. Other activities include the biennial Professor Harry Messel International Science Schools and, in alternate years, the Science Teachers' Workshops - for NSW and ACT high school science teachers.

The Science Foundation consists of Governors (mostly company representatives) and Members, the Director and ex-officio members of the University. The Science Foundation is administered by an Executive Officer, currently **Mr Adam Selinger**. For more information, pick up an Annual Report from Adam, or visit the Foundation's web site <http://www.physics.edu.au/foundation/>.

School of Physics Support Staff contacts

Paul Harbon is the **School Manager (Ext. 12636)** with overall responsibility for the administrative and day-to-day functions of the School (**Room 212**).

Chindy Praseuthsouk is the School **Administrative & Human Resources Officer (x 65370)**. The Main Office handles all general enquiries and provides administrative assistance to the School and Science Foundation (**Room 216A**).

Jean Pierre Cheaib (JP) as **Executive Assistant** to the Head of School and is the School **Administration Assistant (x 12537)**, assisting the Administrative & Human Resources Officer and JP is located in the Main Office (**Room 216A**).

Sang Huynh is the School **Human Resources Assistant (x 14315)** assisting the Administrative & Human Resources Officer in all staffing-related matters and is located in the Main Office (**Room 216A**).

Nelly Liew is the School **Finance Officer (x 15439)** assisting the School Manager in the financial management of the School (**Room 205**). **David Young** is the **Finance Assistant (x 12711)** and also operates the Store (**Room 205**), ordering supplies, processing invoices and petty cash.

Nathan Apps is the Senior Technical Officer responsible for lecture demonstrations (**x 13462**) used in classes (**Room 410**).

Eve Teran is the **Student Support Officer (x 15975)**. The Student Support Office provides support to all students, postgraduates and undergraduates and administrative support for teaching staff (**Room 202**).

Hyacinth Alfonso is the **Student Support Assistant (x 13037)** in the Student Support Office (**Room 202**).

Tony Monger is the **Computer Infrastructure Manager (x 13426)** deals with any enquiries about desktop systems, PCs, Macs, printers etc. (**Room 329**).

Seb Juraszek is the School's **Network Manager (x 12639)** who provides support for UNIX/Linux workstations and the School's server (**Room 460**).

George Shan is the **Computer Support Officer (x 17475)** and administers PCs and MS products (**Room 331**).

Note: See <http://www.physics.usyd.edu.au/local/intro.shtml> before contacting IT support staff for help.

Michael Paterson is the Workshop Manager and **Terry Pfeiffer** the Technical Officer responsible for mechanical work, including fine machining, instrument making and repair/design of lab equipment and are located in the **Physics Workshop (x 12554)**, which is located at the western end of the ground floor (**Room 234**). For workshop services you can either contact Michael or place your order online at the e-service desk on <http://www.facilities.usyd.edu.au/afm/reports/index.cfm>, providing a comprehensive job description and plans.

There are also a number of **First Aid Officers** in the School. In the event of any accident or injury to any persons within the School, a First Aid Officer should be called immediately. The following staff are currently First Aid Officers:

Dr Phil Dooley	Room 211, A28 Physics Building	Phone – 9351 3201
Dr John O'Byrne	Room 568, A29, Physics Annex	Phone – 9351 3184
Dr Joe Khachan	Room 363, A28 Physics Building	Phone – 9351 2713
Barry Naphthali	Room 406, A28 Physics Building	Phone – 9351 2958
Terry Pfeiffer	Room 241, A28 Physics Building	Phone – 9351 2554 / 15969
Eve Teran	Room 202, A28 Physics Building	Phone – 9351 5975

Please consult the School of Physics web page <http://www.physics.usyd.edu.au/> to access a complete list of all School of Physics staff.

Occupational Health and Safety (OH&S)

The School takes OH&S matters seriously, and has a duty of care to staff, students and visitors. The School has an OH&S web page (<http://www.physics.usyd.edu.au/local/ohs.shtml>), with information on and links to University OHS and Injury Management, Risk Management (insurance) and forms. Also, lists are given of first aid officer contacts and building wardens (in emergency control situations). The first item on the web page is an incident and injury report form, to be completed whenever this may occur.

Rob Davies is currently the School Safety Officer

Rob Davies	Room 229, A28 Physics Building	Phone – 9351 2484 Mobile – 0434 077 525
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Getting Started

New postgraduate students will need to complete a School of Physics personal details form (attached). This form has spaces for personal details such as home address and phone number, name and contact number for next of kin etc. These personal details are for emergency use only and all details are kept strictly confidential. Submit your completed form to the Physics Student Support Office (Room 202).

Please ensure that you visit the following web site (<http://www.usyd.edu.au/staff/directories/index.shtml>) and enter your contact details, you will be asked for your Unikey log in details to access this web page. Your University contact details will then be available in the University electronic phone book.

Access

The School of Physics buildings are open between approximately 7:30am and 5:15pm, Monday to Friday. If you require access outside these hours please see the Human Resources Assistant who will order a magnetic swipe card for you. This card can be picked up from the Campus Security/Traffic Office, in the Services Building on Codrington Street. You will need to show proof of identification when you pick up your card. Students are required to make a \$25 deposit when picking up their card (keep the receipt in order to claim your deposit back when you return your card). This card allows you to access building A28 (Physics Building) from the doors at either the east or west ends of the building and access to building A29 (known as the Physics annexe) from its ground floor entrance.

Should it be necessary, the Human Resources Officer will supply you with keys, code numbers and swipe card access to your office and other relevant rooms. Please check access needs with your supervisor.

Administrative and HR Services

All enquiries on these services should be directed to sopadmin@physics.usyd.edu.au. Please state your name and contact details, including the relevant room number, and provide a description of the service request.

This email address, together with a list of services, can be viewed on the Physics website using the local tab.

Leave

Postgraduate students who need to travel off campus to work on their research project (eg visit telescopes, CSIRO), must use the School's "*Fieldwork, Special Duties and Other Leave form*" available to print from (http://www.physics.usyd.edu.au/pdfs/local/student_leave.pdf) to request fieldwork, special duties, recreation, sick or other leave. When travelling overseas an itinerary **must** be attached for insurance purposes and your supervisor must approve any associated costs. The form should be submitted to the Physics Student Support Office (Room 202).

Mail

There are two deliveries and pick-ups from the School each day. The first mail is picked up/dropped off at approximately 8:50 am and the second pick-up/drop-off is at 1:50 p.m. There are 'outgoing' mailbags located on the wall in room 216 on the ground floor. You may post non-personal mail here. For external mail, no stamp is required however you must ensure sure you attach a School bar code on the back (see the Main Office, Room 216A). For international mail you must also indicate whether it is to go by Airmail or Overseas Courier Service. Stamped personal mail may also be posted in this bag. Incoming mail is sorted into group pigeonholes in room 216. If you require stamps for personal mail, or other packaging, there is a Post Office in the Badham building on Science Road. Large packages will need to be taken to / picked up from the Post Office personally.

Telephones and Faxes

To make a call to another extension in the University, lift the handset, then dial the five-digit extension number (ie the last five digits of the eight digit local number). To make an external call in the Sydney area, lift the handset, dial 0 (for calls less than 5 minutes) or 7 (for calls greater than 5 minutes – to minimise cost) for an outside line, then dial the number. Phones in student rooms do not have STD or IDD access. If you need to make a long distance call for research purposes, please see your supervisor or the Main Office. For instructions on the use of your phone's features please visit the following website: <http://www.usyd.edu.au/su/phone/dialog/dialoghome.html>

The fax number for the School of Physics is 9036 7158 and the fax machine is located in the back of the Mailroom, room 216. Incoming faxes sent to this fax machine are taken from the fax machine periodically throughout the day and are placed in pigeonholes in the mail room. Some facility rooms situated throughout both A28 and A29 also have fax machines.

Computers

Please see the Physics IT Support website <http://www.physics.usyd.edu.au/local/intro.shtml> for information and initial help regarding any issues you may have with regards to computing at the School. Local info sheets/user guides are also available. Your supervisor will arrange for an account on the physics server. Your supervisor will also look after the provision of a computer for use on your project.

Library

The University of Sydney's Fisher Library, with over four million volumes, is the largest academic library in Australia, and one of the largest libraries in the country. It is designed primarily to meet the needs of the University community, but is also available for use by graduates of the University and, to a lesser extent, by the general public.

The Library has made extensive use of automation in its procedures and has an online catalogue, which is available in Fisher and all branch libraries. The online catalogue can be found at <http://www.library.usyd.edu.au/Home.html>. Other services offered include electronic retrieval of information from online databases and CD-ROM products, assistance with the location of references, reader education classes and audio-visual materials such as films and videos.

Your Student ID card acts as your library and access card and will allow you to use any campus library to borrow books. Journals and other books on reserve may not leave the library. However, you can copy them there.

The Sciences library is located in the Jane Foss Russell Building (across City Road via a footbridge or traffic lights), next door to the Wentworth Building.

Photocopiers

There are two main photocopiers for School use, located in room 216. You need a group access code to use these machines (see the Main office, room 216A). When using the machines, press ID, enter the code in the ID window, press PASSWORD, enter the code again in the PASSWORD window, press ID again and then proceed with photocopying. When finished, press ID again. Some research groups also have photocopiers.

Tea

Coffee, tea and milk for morning and afternoon teas are available to staff, postgraduate and honours students in the tea room 319. Biscuits are provided by the Science Foundation.

Use of email

Use of email should conform to the University's policy. The University policies on use of email are available from <http://www.usyd.edu.au/policy/>, do a search for "email".

PRSS (Postgraduate Research Support Scheme) and Denison funding – Research Students Only

The Postgraduate Research Support Scheme provides support for enrolled postgraduate research students. Funds are allocated to Schools and Departments based on their research enrolments in the previous year. The School offers at least one round per year, with the main round during April and if funds are not spent or committed in the main round, a second round may be offered later in the year. In addition, up to \$1000 during the total period of candidature, is available from the School's Denison Bequest to postgraduate research students. Applications for Denison funding are offered at the same time as PRSS.

Please note that information regarding PRSS and Denison funding is circulated **via email** in April of each year and the guidelines are subject to change from one year to the next. General information about PRSS can be found on the Research Training website at <http://www.usyd.edu.au/ro/training/prss.shtml>.

Publications

The School maintains a database for all staff/student publications. The Main Office collects publication data, and will periodically request papers via email. Please ensure that you keep a copy of the final version of your paper/publication (official reprints, pdfs or web links which include all details, including volume and page numbers, are required), to be sent to the Main Office (Room 216A) on request.

Each year the University submits to the Department of Education, Science and Training (DEST) details of staff publications and external grants, and based on this information the School of Physics receives funding, so it is important that the information is accurately recorded. You will be contacted early in the year for this information. It is important that you follow instructions precisely. For every one of your eligible publications (criteria will be listed in the handout) we need to know names and initials for all authors, their affiliated institution (no acronyms), the type of publication it is - journal, conference proceeding etc, whether it is refereed or not (if it is a refereed conference paper then you must be able to provide proof of refereeing), volume no., start and end page numbers, for conference proceedings the name, year and place of the conference, and for books or book chapters full publication details of the book including the ISBN number.

Please note that in most cases postgraduate students will coauthor a publication with at least one member of Physics staff (eg their Supervisor), who will submit publication details to the administrative team.

School Committees

There are a number of committees within the School. These are:

The School Management Committee: provides advice to the Head of School on issues relating to day to day administration of the School. The Head of School's Advisory Committee meets weekly, except on the 1st Monday of each month when the Professorial Advisory Committee meets.

The **Academic Programs Committee** manages the teaching program of the School of Physics, and provides advice to the Head of School on matters relating to the School's teaching program.

The External Relations Committee provides advice for the Head of School on issues relating to student recruitment, raising the visibility and attractiveness of Physics and the School of Physics to target audiences - i.e. school students, school teachers, students/visitors in the building, the public, Alumni and employers. The committee also oversees outreach activities and community liaison.

The Occupational Health and Safety Policy Committee provides advice to the Head of School on issues relating to occupational health and safety matters within the School of Physics. The School Safety Officer, who is a member of the Occupational Health and Safety Policy Committee, is responsible to the Head of School on a day-to-day basis for operational matters regarding occupational health and safety.

The IT Policy Committee provides advice to the Head of School on the use of information technology within the School. Issues addressed by the committee include the development of the School's computing network, visibility of the School on the internet, and the use of computers for teaching and research.

The Research Committee provides advice to the Head of School on issues relating to research. This Committee ranks submissions for internal grant schemes (Denison small and travel grants), ranks school submissions to University grant schemes, and provides advice and support for external grant scheme applicants (eg ARC Discovery Projects).

The Professorial Advisory Committee (PAC) provides advice to the Head of School on policy issues relating to the School. It also provides a forum for the Head of School, the Director of the Science Foundation and the Chairs of Committees to report to the School. All areas of the School are represented on the PAC and representatives feed information back to their groups. The Professorial Advisory Committee usually meets on the 1st Monday of each month during semester.

The School Board provides advice to the Head of School on policy issues relating to the School. It is a wider forum than the Management Committee consisting of all academic staff, two general staff representatives and two student representatives. The School Board meets once a semester. The School Board is constituted and operated as specified by resolution of the Senate (for further information see Resolutions of the Senate - Departments, Schools and Committees 21. (1)). All staff and students are welcome to attend.

The School of Physics Advisory Board (formed in 2006) provides advice to the Head of School on matters affecting the School, including the structure and content of the teaching program and the development of innovative teaching methods, research profile and management and strategic research directions, general resource and management issues, and research and teaching collaboration with other organisations.

Physics Vehicles

There are four vehicles available in the School (Camperdown Campus) for University business use only, and only by members of staff or postgraduate students who hold a full driver's licence and have completed an authorisation form, which can be obtained from the Main Office (Room 216A). Students who need to utilise a University vehicle for work reasons must also seek approval (in writing) from the Head of School prior to their first trip. The letter of request must contain details such as name, student number, destination, reason for travel, and current NSW driver's license number. Currently the School has three station wagons and a utility available for use on University business.

Requests should go to the Main Office via email to sopadmin@physics.usyd.edu.au. You can view the booking calendar at anytime at <http://www.physics.usyd.edu.au/cgi-bin/calendar2/calendar.cgi>, but all bookings must be done through the Main Office. When using these vehicles please remember to fill in the vehicle logbook (inside the vehicle) before you leave and when you return. You need to supply your name, date, destination, reason for use, and odometer reading. If the car requires fuel, please use the Fleet card which should be attached to the keys (ask the person from whom you receive the keys). Keep any receipts issued at petrol stations and return to the Main Office immediately upon your return. Any problems (mechanical, electrical or accidental damage) with any of the School's vehicles **must** be reported to the Main Office upon return, or via email ([sopadmin](mailto:sopadmin@physics.usyd.edu.au)) if out of hours. A small first aid kit, Sydney street directory and e-tag is in each vehicle, to remain in the vehicle when needed.

CabCharges for short trips are also available from the Main Office (Room 216A). Please provide an account number when requesting a **CabCharge** (see your supervisor).

Getting Around

Maps of the campus and surrounding area are available from the Main Office or the Student Support Office.

Public Transport: Buses can be caught on both City and Parramatta Roads. Trains can be taken from either Redfern (most trains); Macdonaldtown or Newtown stations, each about fifteen minutes walk away.

University Security Bus: It is advisable not to travel around the University on your own after hours or when dark. Security Buses are available and there are marked stops all over campus including outside the Physics building. Security can be contacted on 9351 3487 or for timetables go to Security Services website <http://www.security.usyd.edu.au/secbu.html>

Taxis: are easily flagged on both City and Parramatta Roads, or you can order a taxi to pick up outside the Physics Building on Physics Road.

Miscellaneous Information and Events

- University Web address: <http://www.usyd.edu.au>
- School Web address: <http://www.physics.usyd.edu.au>
- School postal address:
School of Physics, A28
The University of Sydney
NSW 2006
- Each Monday during semesters at 3:30pm the School holds a Colloquium (in the Slade Lecture Theatre) on a topic of general interest to academic staff of the School; cake is provided. All research students are encouraged to attend and will be advised by email of the week's topic and presenter.
- Research groups also hold their own informal meetings, discussion groups or seminars on items of more particular interest – you will be advised by email of when these are held.
- Social events are held throughout the year.
- The School holds an end of year function each December. A small fee is charged to contribute to catering costs.

I look forward to working with you in the School of Physics.

Anne Green
Professor and Head of School