The PG Welcome Pack for Warwick Physics

A guide to surviving a PhD, written by PG students and for PG students

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1 Introduction

Welcome to postgrad life!

Doing a PhD or any other postgraduate degree can be a fun and fulfilling experience – you spend your days expanding the horizons of human knowledge, and (in most cases) you get to choose when you clock off. When you first start, though, it can be daunting. The project can be hard work, and it can sometimes be difficult to prioritise your well-being. Problems like overwork and ‘feeling like you don’t belong’ (imposter syndrome) are not uncommon.

There’s a lot of common ground in the experiences postgraduates have. There’s also a lot of advice that gets passed down from one generation of students to the next, about how to get the most out of your time here and how to avoid or manage the problems that might come up. The idea of this welcome pack is to put a collection of this advice into one place, where (if you like) you can refer to it throughout your time here. It’s your guide to surviving a postgraduate course. We’ve split the document into sections: general information about the PhD courses here, advice on how to look after your well-being, and miscellaneous pieces of practical advice on life during the PhD. Group-specific information for some groups (at the time of writing, only the astro group) is also added on at the end.

This document is student-led and intended to be informal. It’s written by volunteers and different sections are written by different people (so the tone won’t be the same from start to end). It’s by no means complete, and anything written here is not necessarily the view of the staff in the department.

The document wouldn’t be possible without all the beautiful students (and recently-ex-students) who worked on it, including Ashley Chrimes, Pat Cronin-Coltsmann, Elena Cukanovaite, Ry Cutter, Matthew Green, Richard Henshaw, Matthew Hoskin, George King, Christopher Manser, Jack McCleery, SJ Spencer, Ares Osborn, Sabrina Outmani, and Rebecca Webb.

This is a living document – we will try to keep it as up-to-date as possible. You can find the online version at [this link].
2 General Information

2.1 Useful Contact Points

- **Supervisor:** Your supervisor is your main point of contact through your PhD. Their role should include helping you with your project, giving you advice for your future career, and looking after your pastoral needs and well-being. Relationships between supervisors and students vary, but on the whole it’s a good idea to meet your supervisor once every week or two. Hopefully your supervisor is somebody that you feel you can approach first if any issues come up. See the ‘Managing your Supervisor’ section for more on the student-supervisor relationship.

- **Reserve supervisor:** A second supervisor is essentially a ‘backup’ supervisor, somebody who can step in if your main supervisor is unavailable for an extended period of time (e.g., hospital leave).

- **Feedback supervisor:** A feedback supervisor is assigned to mark and give you feedback on your progression through the course, both on the research side and on the ‘Transferable Skills’ tasks, particularly the progress reports you’ll have to do at various stages in the PhD (see Section 2.4 for more info on what this is).

- **Director of Graduate Studies:** Currently James Lloyd-Hughes. This is the person who overall is in charge of postgrad studies within the physics department. There is usually a meeting with the DGS about six months into your PhD to discuss progress and make sure you have settled in okay (in the physics department this meeting is generally fairly laid-back). You can also approach the DGS regarding issues which either your supervisor can’t help with, or which you’d rather not discuss with your supervisor.

- **Head of Physics Department:** Currently David Leadley. This is also somebody you can approach about any issues that might come up.

- **PG Coordinator and UG and PG Administrative Officer:** Currently Roz Johnstone and Maxine Little, respectively. Both are people you can talk to about any issues you might have, and if you have any administrative questions they can hopefully either help you or direct you to somebody that can.

- **Staff-Student Liaison Committee:** The [PG-SSLCC](#) is a collection of staff and students that meets on the last Friday of every other month. There are a number of student roles (elected in the first meeting of the academic year) and a handful of
staff who also attend. Elected roles include a chairperson and representatives of
the research groups within Physics, as well as three Athena SWAN gender repre-
sentatives (male, female and non-binary), a BAME rep, an international students
rep, a well-being rep, a health and safety rep, and a social secretary. All students
are welcome to attend any meeting, and free lunch is provided. These meetings
are good places to raise issues, grievances or any other topic which might affect
multiple students. You can either attend and raise the issue yourself, or ask the
representative for your group to raise it for you.

- **Feedback and complaints:** A University-wide anonymous feedback form can be
  found at [https://warwick.ac.uk/services/feedbackcomplaints/feedback](https://warwick.ac.uk/services/feedbackcomplaints/feedback).
  The University’s complaints procedure can be found at [https://warwick.ac.uk/services/feedbackcomplaints/students/complaints](https://warwick.ac.uk/services/feedbackcomplaints/students/complaints).

- **In cases of bullying and harassment:** There is a university policy on bullying and
  harassment, and all staff (especially supervisors) should be aware of it. If you
  have an issue which you feel is not being dealt with well, escalate it! The contacts
  above are all places you can raise this kind of issue.
2.2 Course structure / thesis deadlines

Doing a PhD is fairly flexible and fluid, although there are some key deadlines. By far the most important is the thesis submission deadline - this is 4 years after your start date (unless you’re part-time). Some people are funded for the whole 4 years, others for 3.5 years. Be aware that while you can work past the 3.5 year funding cut-off, it might not be desirable! People tend to start their thesis about 6 months before the funding cut-off. There are no hard rules on when to start your thesis, but you are prompted to start it at the start of 4th year through the PGTCSS doc skills 3 course (see section on Moodle/Transferable skills below).

Other than that, there’s an interview (it’s quite informal, more a discussion) about 6 months into your first year, just to check that you’re settling in, that you’ve started a project and have some ideas of what to do going forward.
2.3 Teaching

During your PhD you will have the opportunity to teach alongside it. There are several roles, including physics/computer lab demonstrator, lab book marker, and example class teacher. During your first week, or perhaps before you start, you will likely be asked to give a list of preferred teaching roles for the coming year and any previous experience you might have. It may be heavily implied this component is compulsory, but these teaching roles are entirely optional and if you are extremely opposed to the idea, you can choose not to do it. Most people, however, generally do some form of teaching as, depending on what role you get, it can be quite a rewarding experience and is a very good skill to learn and get practise with. One of the other main reasons is these roles are relatively well paid and this is a nice supplement to the monthly stipend. Note this income is taxable, however, you are unlikely to earn enough through these roles alone to meet the tax threshold.

Most people will stay in the same role for 3 years of their degree, and then give it up when they go into their final year, allowing them to focus on their write-up. Again, this is not compulsory and if you wish to continue with your teaching, you can. You also do not have to stay in the same role you were originally assigned if you don’t like it. Just make sure to email the department and let them know you’d like to change roles in the coming year.

2.3.1 Physics Example Classes

Example classes can be quite rewarding, but like all roles, very time consuming. In this role, you will be assigned ∼20 first-year undergraduate physics, or MathsPhys, students whose weekly assignments you will mark and then give back to in a 1-hour long class at the end of the week. In your class you will have another example class teacher present, and as such, you will also attend someone else’s class.

Students will submit their weekly assignments to your pigeon-hole by 11 am on a Monday. This is located in the Undergraduate Workroom (top floor of the physics building, besides the admin office). Rashida, who is the Undergraduate Secretary, will often put a red card into the pigeon-holes at 11 am so you know which students have submitted their assignments late. You will then have until Thursday or Friday to mark the assignments, enter them into a database, and prepare for your lesson. Small groups of teachers, who help in each other’s classes, will often meet or discuss during the week the main issues the students in their assignment(s), and what they plan to do in their classes. Generally, the first half of the lesson, or however long it takes, is spent going through the two hardest questions from that week. In terms where students will be submitting multiple assignments each week, this means the most difficult from each of them. This doesn’t necessarily need to be a question the class answered incorrectly, but if it’s clear they haven’t understood the physics behind the question it can be helpful to
talk it through with them. Of course, this isn’t a hard-and-fast rule, just what previous experience indicates most students find helpful. The latter half, however, is really up to you. The assignments will have additional optional questions on them (that most students will not do), so teachers often decide to go through a few of these questions with the class. Discussing with other teachers who have been doing this for a few years can be very helpful in getting ideas about what to do. Of course, asking your students what they find most helpful and what they’d prefer to do with the time is also key in making sure the class is at least worthwhile for them.

This role is one which runs the longest throughout the year, as you will have a class almost every week the students are here. While this can be good for your bank account, it can also be very difficult to manage your time properly. Just remember this work is factored into, or so we’re told, the degree length, so your supervisor shouldn’t have any issue with you marking at your desk. However, you may be in situations were research will need to come first during the day and this will force you to mark at home or stay late to mark. You shouldn’t feel like you always have to give up your time in the evenings to do this though. These classes will almost certainly feel daunting at first, but it will get easier as you get more used to it. You will be asked questions you won’t know the answer to, and you will be asked easy questions you’ve completely forgotten the answer to. In these instances, it is always best to simply say you do not know, and either help the student find the information they’re looking for or perhaps offer to get back to them. This is often a good way to start a discussion with students. Remember: you’re not a lecturer, and you’re not expected to have the same capabilities as a lecturer, it’s good to keep that in mind. A relaxed informal environment is often a good way to develop a good rapport with your students and can lead to the classes being quite enjoyable. Hopefully, you can get as much out of the classes as they will.

### 2.3.2 Maths example classes

This role is similar to the Physics example classes but with a few key differences. Firstly, you are responsible for two classes of around eight students each (this can vary slightly) and there is only one PhD student per class. Secondly, these classes are ran in support of one particular module not a selection of modules. Finally, only Physics students take this module (which is compulsory for them) but MathPhys/Maths etc. are not allowed to take this class. Aside from these differences the marking/time commitments are broadly similar to those of the Physics example classes and the advice given there most certainly applies here. This role only runs for the first two terms, and typically starts in Week 3 of the first term.

This module and class is designed to bring every student to the same level of mathematics by the end of the year. Typically, students who have done Further Maths (or equivalently) will find the first term more straightforward but the second term will have new challenging material for all students. Since these classes are a lot more focused (and smaller!) than the physics classes, you are able to spend more individual time with students/provide more specific feedback if you wish. You can also design much
more focused classes tailored to the level of your group and the content that week compared to the physics example classes due to the smaller class size and narrower range of material.

The content and assignments are broadly the same each year which makes later years more straightforward to mark and plan for. In the first year it is useful to see how your fellow tutors approach the subjects (though there is no one right way!) and we have regular coffee sessions to discuss how classes are going and to brainstorm how to tackle specific problems i.e. a particular question or topic that has affected all classes. Other tutors can also point you towards useful resources such as online tools, particular textbooks, exam preparation material etc. which you can use to structure your classes.

Your responsibilities for this module are the two seminars per week and the associated marking for these. Outside of this, some tutors do have open office hours (though students always seem to come at different times) and/or run additional revision seminars at the end of each term to prepare for the exam at the beginning of the next term. However this is done entirely at your discretion and is not expected by the department in any way!

2.3.3 Second year Laboratory marking

In this role, you will be assigned a specific Physics Laboratory experiment to mark. You will usually receive 6-8 lab books, and the students are expected to work on the project for 16 hours (4x4hr sessions). You will be marking the projects on the University marking scheme. You will be mostly writing helpful feedback and comments in their books, filling out a summary of the marking you have done for the students, and also providing oral feedback in case the students have any follow-up questions on the project.

The students will have to write up some of these experiments as lab reports, and it can be useful during the oral feedback to discuss this with them. Usually they haven’t even thought about the report yet, but some students may ask some more in depth questions about the experiment in preparation for the report. However, remember - you are not there to tell them what to write.
2.4 Moodle/Transferable skills/Physics Training

Please note this section is up to date at the time of writing, but things may change – check the links below, or the department website, for up date info.

As well as your research, there are some admin / ‘transferable skills’ requirements as part of the PhD. It can be a little confusing, but there are basically 2 separate strands of ‘not research’ stuff: the Doctoral Skills training (sometimes you’ll see this referred to as Transferable Skills), which is supposed to teach general research skills and personal development, and some graduate-level physics training by the Physics Graduate School.

2.4.1 Doctoral Skills

These courses/tasks are spread two per year over the first 3 years (typically). In years 1,2 and 3, you have to do ‘Doctoral Skills’ 1,2 and 3 - these include things like writing a short literature review, a plan for the coming year etc. Doc Skills, as with many of these courses, are available through Moodle.

If you like, you can also complete a Postgraduate Certificate in Transferable Skills in Science (PGCTSS). For this, in addition to the Doctoral Skills tasks, there are short (3 day) courses in each of these years for a total of 6 courses over the PhD. The standard first year option is ‘team working’, in second year it’s ‘science communication’ and in third year it’s more flexible, with several options. In most years you have the option to switch this course for a term of language classes.

You can find the Doctoral Skills webpages, with all the available options and more details, here: https://warwick.ac.uk/fac/sci/physics/current/postgraduate/regs/skills/

2.4.2 Physics Graduate School

There are a series of courses you can choose between which provide physics training for PhD students. You’ll need to gain a total of 6 credits over the PhD, the advice is to try and get them done earlier rather than later, but it’s up to you. You can also substitute undergraduate lectures courses if your supervisor and the Director of Graduate Studies agree, or use attendance at workshops for credits (these are often worth 2 credits, but the total is determined by the head of postgraduate studies). The relevant webpages can be found here: https://warwick.ac.uk/fac/sci/physics/current/postgraduate/pgs

You’ll sometimes hear this scheme referred to by the historic name of a previous physics training scheme, MPAGS (Midlands Physics Alliance Group).
Astro specific: Astro specific courses are not so common unfortunately, but include ‘astrophysical techniques’, ‘formation of planetary systems’, and ‘astronomy background reading’ amongst others. Not all courses run every year. Astro background reading is compulsory for all first years, but is worth 2 credits.
3  Wellbeing

3.1  Mental health

Completing your PhD is a stressful time for anyone. This stress can contribute to mental health issues, or can exacerbate issues that might be already present. There are various places you can reach out to if things get too difficult.

- *Talking to your GP:* Any GP should be able to assist you if you need help regarding mental health. At the University of Warwick Health Centre, you can book a double appointment with Dr F Chaudri to discuss mental health issues, including depression, anxiety, stress, low mood, eating disorders, self-harm, panic attacks, bi-polar, bereavement support, OCD, addictive behaviour and phobias. Although, Dr F Chaudri is recommended by the practise for mental health issues, other doctors might be able to help as well. It is best to call the practise when it opens at 9am (this might take a couple of tries since other people might be calling as well) and usually you get an appointment the same day. During the appointment, the GP will go through the options available to you, including medication, the IAPT service run by the NHS (for depression, anxiety, panic attacks, stress, OCD), eating disorder specialists, therapist (self-harm), psychiatrist (bi-polar), bereavement support etc.

- *IAPT:* IAPT offer counselling, CBT etc. You do not have to be referred by the GP to use this service, but you can discuss with the GP if it is applicable for your situation. You will first have to call to make an appointment for a call consultation with one of the specialists at IAPT. The wait for this appointment is usually a couple weeks to a month. During the wait you will have to fill in a form which will guide your phone call with the therapist. During the phone call the therapist will let you know what treatment is appropriate for you. NHS mental health services can be difficult to navigate through, but you should keep trying to find what works for you.

- *Warwick wellbeing centre:* They provide face-to-face individual counselling, email counselling, group therapy and specialists workshops. You are welcome to book an appointment to discuss any issues with your postgraduate work, as well as unrelated problems. You do not have to have a specific mental health problem. They recommend that it is better to see them earlier rather than waiting until the difficulties get worse. You can go in to book an appointment to receive counselling
at the University. Usually, they provide you with 3 counselling sessions around an hour long. They are open all year around. The service is free.

- **Nightline:** This service is provided by the University of Warwick. You can contact them by phone, visit them at the Nightline building, instant message (9pm-1am) or email. It is best to look up their contact details by searching for ‘Nightline Warwick University’ on Google. It is open from 9pm to 9am (every night) during the term time. It is student-run, confidential and non-judgement peer-to-peer support listening service. You can contact them if you have a problem you need to discuss with on or just need someone to talk to. They also provide pregnancy tests, condoms, lube, tampons, sanitary towels, attack alarms, earplugs, tea and biscuits, all for free.

- **Suicide prevention:** If you feel suicidal, you can call Samaritans on 116 123 or email them at jo@samaritans.org (the contact details may change, so it is best to search for ‘Suicide help NHS’ on Google for updated numbers). There are also other organisations you can contact, such as CALM (for men), Papyrus (for people under 35), The Silver Line (for older people) and Childline (for those under 19). If your life is in danger you should not hesitate to call 999 or ask someone to call or take you to A&E. If you are on campus you can also call Campus Security (024 7652 2083).

- The counselling service maintains a list of emergency contacts here: [https://warwick.ac.uk/services/counselling/emergency_contacts/](https://warwick.ac.uk/services/counselling/emergency_contacts/)

Keep in mind that alcohol is a depressive, and can make a low mood worse. Keep an eye on how much you are drinking, especially at periods of stress or low mood. Make sure that you are happy with the amount that you are drinking.

### 3.2 Physical health

Wellbeing doesn’t just mean mental health. It is important that you have regular appointments with your GP (and dentist) to check your general health. There is a health centre on campus that you are encouraged to register with, and you can find more info about this and the services they provide here: [https://www.uwhc.org.uk/Home](https://www.uwhc.org.uk/Home)

Some physical ailments can cause you to feel down and tired. None of your issues are embarrassing and the GP will not judge you.
3.2.1 Shots

If you travel a lot make sure you have full immunisation. Some shots are provided free by the NHS (depending on the country you are travel to), others will have to be done privately.

3.2.2 Blood Tests

If you need a blood test, there is currently no service on campus that will do this. Your GP will be able to give you a list of nearby pharmacies that offer blood test appointments.

3.2.3 Sexual Health

The university health centre offers some sexual health services: [https://www.uwhc.org.uk/Our-Services/Clinics](https://www.uwhc.org.uk/Our-Services/Clinics)

The nearest specific sexual health clinic is the G.U.M. Clinic in the City of Coventry Health Centre (3rd floor). You can call them on 0300 020 0027, and they provide both booked appointments and drop-in clinics.

The SU organises a series of Drop-In Sexual Health Clinics each year for students, which are a free confidential drop-in service that offers testing for sexually-transmitted infections (STIs), as well as advice on sexual health matters and contraception. The clinics are held in the SUHQ building on campus (next to Rootes, on the Piazza), provided by Coventry Integrated Sexual Health Service (ISHS). More info here: [https://www.warwicksu.com/campaigning/campaigns/welfare/sexualhealth/dropinsexualhealthclinics](https://www.warwicksu.com/campaigning/campaigns/welfare/sexualhealth/dropinsexualhealthclinics)

Emergency contraception can be found at your local GP or pharmacy. It is best to search for ‘Find Emergency contraception services NHS’ on Google to locate the nearest provider. Most Boots pharmacies provide emergency contraception there-and-then, following a short consultation. The nearest Boots to the university that provide emergency contraception are in Cannon Park, and the Central Six Retail Park in Coventry. The health centre on campus can provide you with a prescription for emergency contraception, but you then have to get this fulfilled at a pharmacy. The health centre also provides a list of nearby pharmacies that offer the morning after pill for free here: [https://www.uwhc.org.uk/Important-Info/Morning-After-Pill](https://www.uwhc.org.uk/Important-Info/Morning-After-Pill)
3.3 Work/Life Balance

PhD students generally have a lot of flexibility in the hours that we work. While this is nice, it can lead us to feel pressure to work longer hours than we otherwise would in, say, a steady nine-to-five job. It’s worth thinking about how you manage your work/life balance, and if there are ways you can set boundaries to avoid becoming overworked.

- **Working hours**: It can be useful to think about how many hours you want to work in a typical week. The department doesn’t provide guidelines on this for postgrads, leaving the decision to be made between students and their supervisors. However, there are places to look for an idea of what is reasonable, such as:
  - Postdocs at the department are contracted for 36.5 hours per week.
  - The Graduate School guidelines for postgrad courses at Warwick suggest a course should take approximately 1800 hours per year, or 40 hours per week (assuming 8 weeks holiday).
  - Guidance is given in other universities, for instance the Cambridge Code of Practice (2018-19) suggests students work around 40 hours per week.

In general, most guidelines suggest around 35-40 hours per week is a healthy amount to work (this is roughly the same total hours as working 9am-5pm).

- **Holidays**: The Graduate School guidelines say that postgrads should aim for 8 weeks (40 days) of holiday per year. Note that bank holidays and the Christmas shutdown are included in those 40 days.

- **Setting boundaries**: The downside of working flexibly is that it’s easy for personal and work life to spill together, which can result in working long hours and can be a general drag on your well-being. Setting boundaries around what is work and what isn’t can help with this. Examples might include only working in a certain place or at certain times, and not checking emails outside of your work hours.

- **Long hours**: There will always be times when it’s necessary to work long hours (for instance around deadlines). However, if you find that you’re working long hours a lot of the time, something may be going wrong.
  - **Efficiency**: Consider how efficiently you’re working. In many cases, working long hours gives diminishing returns in terms of how much you get done – it’s often more efficient to work in focused bursts with regular breaks.
  - **Talk to your supervisor** about your working hours and about whether they’re satisfied with the amount of work you’re doing. If you’re working long hours but your output is fine, you can probably afford to pull back a little.
– Also consider that in research there will be some amount of projects that don’t work out as expected – this is part of the job, and you shouldn’t feel pressured to work extra hours to make up for it when this happens.

• Workday structure: Apart from some compulsory events, lots of PhD students can be quite flexible in the hours that you work. For some people this is a bonus as you can work the hours that suit you best. Others find if they enforce a structure on themselves (such as 9am-5pm or 10am-6pm) they can more easily keep a separation of work and home life. Try to experiment and find what works best for you.

• Where to work: Students will have a desk somewhere in the department. Depending on how you work best, you might find it easiest to work from here, or you might prefer to work somewhere else (eg home, the library, a café ...), or a mixture of several places. Bear in mind that working from a dedicated space (eg the office) might make it easier to keep work and home life separate.

• Tracking hours: Some students in the past have tried tracking how many hours they work. This can be a useful check to avoid working too much (or indeed too little). However, in some situations the added pressure that time-tracking gives can be bad for your well-being, so be cautious of this.

Overall, your health and well-being are more important than the work you do. If the hours you are working are making you stressed or otherwise impacting on your health, don’t be afraid to take time off to help you recover. A good supervisor should be understanding.
3.4 Social events and Socialising

There are plenty of opportunities for socialising as a post-graduate, both within and outside your research group. The most important thing is to find a good balance that works for you - don’t worry about attending everything that goes on! Social loneliness contributes to poor wellbeing, but having enough time to yourself is just as important.

Each research group will have its own calendar of social events - film nights, pub trip, coffee clubs and so on. You should be made aware of these by other members of your research group, but feel free to ask around. Many groups have lunch together in their common area. There are also a number of department-wide events throughout the year, often organised by the Social Secretary of the PG SSLC, which are advertised via email.

Finally, the Warwick PG Hub organise a number of events across campus, which are detailed here: [https://warwick.ac.uk/services/library/pghub/social/](https://warwick.ac.uk/services/library/pghub/social/).

A few popular events to highlight:

- Pub Wednesday - A trip to the Dirty Duck (the main bar owned by the SU) open to all Physics Postgraduates (Wednesday evenings).

- Research Refresh - A coffee-and-cake morning open to all post-graduates and held in the Wolfson Research Exchange on the Third floor of the library (Thursdays, 10:30 – 12:00).

- Wellbeing coffee - A coffee club for Physics postgraduates in the Physics Common Room, which also acts as a safe and friendly space to bring any gripes about your work and teaching, or any concerns about wellbeing (Fridays, 15:30 – 16:30).

- PG evening seminars – A more work-related social event. Seminars are given by PG students, and only PG students are supposed to attend, so the atmosphere can stay pretty informal. There’s free pizza and drinks (both alcoholic and not). A good opportunity to practise giving talks, to find out what other people are working on, and to chat and eat pizza. (Every other Thursday, 17:30 – 19:00).

A lot of social activities happen in a pub setting, or may otherwise involve alcohol. Many people who do not drink alcohol attend and enjoy these events, and you should never feel under pressure from anybody to drink.

There are plenty of societies and sports clubs at Warwick ([https://www.warwicksu.com/societies-sports/](https://www.warwicksu.com/societies-sports/)), so if you want to pursue a hobby or find a new one, there will be plenty of opportunity. There are also a number of social sporting activities that you can attend for free, without a Warwick Sport membership ([https://warwick.ac.uk/services/sport/active/rock-up-and-play](https://warwick.ac.uk/services/sport/active/rock-up-and-play)).
3.5 Imposter Syndrome

Hello! This section will be covering the rather undelightful topic of imposter syndrome, so buckle in!

Imposter Syndrome:

“A false and sometimes crippling belief that one’s successes are the product of luck or fraud rather than skill. “
- Merriam Webster

Every position in academia is competitive, be it a PhD studentship or Head of Department. No matter where you are in the university pyramid scheme, there will always be other people gunning for the same opportunities. Because of this, we often find ourselves doubting our own competence, believing others are more deserving. These thoughts are the roots of imposter syndrome! In this little guide, we will explore what imposter syndrome is, how it effects people, and ways to moderate it. Hopefully, by the end of this section you’ll be aware of how to catch when you’re experiencing imposter syndrome and start thinking of ways to counteract these intruding thoughts.

Imposter syndrome was first spoken about in a journal article in 1978, describing it as a psychological phenomenon that affects predominantly women. Later studies showed that it pretty much touches anyone in a “high profile” job. In fact, the condition is so universal, you can find literally thousands of online articles covering the topic! To save you some time, the general consensus is that self-doubt is human and a little bit keeps us performing well, but too much is bad!

The symptoms are broad and there’s no feasible way to cover every niche expression of imposter anxiety. So instead, we’re going to cover the headline indications, the smoking gun(s)! Popular media has split imposter syndrome into 5 categories (though none of this is peer reviewed, so take it with a grain of salt.). People can exist in more than one category.

1. The Perfectionist

Probably self-explanatory, but the perfectionist is described as an individual who feels anxiety and stress when their work does not meet their own “impossibly high” expectations. The perfectionist will dwell on the mistakes of their work and worry about where they could improve, without taking time to consider what makes their work brilliant. This can mean: work gets submitted late, or not at all due to fine tuning. Missed opportunities, as they become available at “Not quite the right time.” And the belief that one is failing due to not meeting self-imposed presuppositions.
2. The Expert
The Expert believes they should know everything in their field. This usually arises from the assumption that everyone around them knows as much about the field as they do and more.

Similar to the perfectionist, the expert will avoid applying for positions from fear of being found a ‘fraud’ for not knowing every speciality of their field. While it is good to improve one’s skillset, we should also take time to appreciate the knowledge we have to share.

3. The Soloist
If you think asking for help or getting assistance on a project makes you unqualified, then you’re probably a soloist. The soloist believes they are only accomplished if they completed the work independently. Although independence is good, collaboration makes for a large portion of scientific discovery. The soloist, for this reason, will often struggle in silence and miss networking opportunities for fear of looking “incapable” and “reliant”.

4. The Natural Genius
Natural Genius is often associated with one’s upbringing. Did you get good grades without really trying? Does everyone around you constantly comment on how clever and talented you are? These types of reinforcement forces one to put stock in their innate ability to learn.

Because of this, the natural genius believes that if they are not good at something immediately, they must be terrible at it. Unlike the perfectionist who wants their work to be flawless, the natural genius expects their work to be passable on their first attempt. This results in excessive self-doubt if work is returned with a lot of feedback and criticism, or in a journalistic sense, returned with major revisions.
5. The Super Human

There is no task too large that the superhuman can’t take on. These character types will take on as many, or more roles than they can handle. Often called ‘workaholics’, the super human believes they have a responsibility to prove themselves by working harder to match the base competency of those around them. This is often at the detriment of a social life and other hobbies. One of the key flaws of the super human is the expectation to excel in every role they’re juggling. Failure in one role, means failure in them all.

![Cartoon image](azilliondollarscomics.com)

Now, you may think “Well yeah, all of this applies to people who are actually smart and actually deserve to be here.” Almost everyone effected by imposter syndrome thinks that they’re the exception and are truly an imposter, everyone else is experiencing anxiety. Quick tip, no one is an imposter!

Alrighty! Now you know what kind of imposter you are. Let’s talk about dealing with it. Unfortunately, most sources state that imposter syndrome never really goes away, we just learn better ways of coping with it.
• **Learning about imposter syndrome:**
  Take time to figure out what feelings your feeling and why. Accepting there’s something wrong that’s effecting your life is the first in a line of steps to help remedy that problem. At the bottom are some sources about imposter syndrome in academia to help you be aware if that’s what you’re experiencing.

• **Pay attention to your thoughts:**
  One of the big buzzwords in [wellbeing](#) at the moment is mindfulness. Make sure to catch yourself every time you’re questioning whether you deserve to be here and challenge those conceptions.

• **Talk to your peers:**
  A good way to gauge your experience is to talk with people in the same situation as you. This may not always be an option but talking out your concerns with someone can be cathartic and help isolate the anxiety from reality. Talk with a supervisor: Again, this is not always a viable option; however, the birds eye view of an academic can help give perspective to your apprehension.

• **Schedule Breaks and Activities:**
  Mostly for the workaholics. Make sure you spend time doing something that isn’t work. Be it a social outing or a weekend reading a book, make sure you take time to do something that isn’t work!

• **Nobodies Perfect:**
  Accept you are going to need help, that things won’t always go right, that you will deviate from your schedule. Set backs are going to happen, and you’ll feel happier and more resilient if you ride the waves instead of fighting them.

• **Criticism is good:**
  Many academics are not trained in delicacy when it comes to feedback. Try not to take criticism about your work personally and use it to improve. If you’re ever unsure about any feedback get someone impartial to assess its fairness.

• **Document your progress:**
  Keep something like a journal of your accomplishments. Adding where you’ve progressed, or compliments you’ve received about your work.

• **A Doctorate takes years for a reason:**
  You are paving new undiscovered research. It’s going to take time and effort. Be patient with yourself.

• **Warwick’s Facilities:** There are [other services](#) Warwick offer for wellbeing.
Hopefully this small tour of imposter syndrome was a little enlightening. Learn as much as you can here but remember to have fun and keep happy!

Other Resources

Times Higher Education
UKERK
Higher Education Chronicles
Forbes
3.6 How to manage your supervisor

- Supervisors and their supervision can vary greatly. Some will have regular check-ups on your work, and others will leave you to your work for weeks to months, with longer meetings to discuss progress. It is more likely than not that you will want to have regular meetings with your supervisor, and if so it could be good to discuss this with your supervisor. As time goes on the amount of meeting time with your supervisor will change depending on how both of you feel you are doing.

- Your supervisor(s) are a good person to speak with about how you are doing with work, as they should be the person that has the best knowledge of your current progress. Asking them about this occasionally throughout your PhD will help you know where you stand, and it can help with imposter’s syndrome discussed above. Some supervisors will bring up the topic without prompting, but if they don’t there is no harm in asking. If there is something you feel you would like to improve on but are not sure (e.g. writing proposals/applications) your supervisor might have advice for this.

- Your supervisor should understand that you may not want to go into academia, and you should not feel a need to work significantly beyond the scope of your thesis if this is the case.

- Don’t be afraid to manage your relationship with your supervisor! Make sure that you are getting the support that you need from them. Most supervisors are good in this regard, but some will take a somewhat ‘hands-off’ approach. Different styles of supervision will better suit different students, and it is completely reasonable to ask for more regular meetings if you feel it is needed. Remember that your supervisor has a responsibility to you as well! Guidelines on the responsibilities of students and supervisors are available on the [Graduate School website](#). The STFC releases [results from a survey](#) which includes, among other things, details about how often students and supervisors meet up.

- If you end up in a situation where you need to talk to someone else about your supervisor, then the head of graduate studies should be your first contact point. Other people on the contact points listed at the front of this booklet may also be able to help.
4 Practical Advice

4.1 Thinking ahead to thesis writeup

The overall goal of your PhD is to produce original work over the course of the program which is then presented in a thesis and examined by (typically) two examiners in a viva (also known as a thesis defense). After this, your examiners will pass you - it is so exceedingly rare to fail a viva! - subject to some corrections which when completed will qualify you for your PhD. Throughout your PhD it is almost inevitable that you will hear “horror stories” of the writeup/viva process which can make the process seem incredibly daunting at times. However, there are a number of things you can do throughout your time at Warwick to prepare you for writing your thesis.

4.1.1 During your PhD

Don’t panic about content volume. This is much easier said than done - at times you are going to feel like your research isn’t progressing fast enough and/or you won’t have enough material. What you need to bear in mind however is a thesis is not a paper. Your thesis gives you the space and time to thoroughly discuss your methods and thought processes and as such you can include a surprising volume of material that you would have to omit from a paper.

Keep detailed notes. This cannot be stressed enough - your thesis will encompass your entire period of study and what seems obvious now will not be as clear in three years time! One useful trick is to keep an ongoing summary document of each project where you briefly summarise how the project is progressing and its results. This is a very useful resource material you will thank yourself for later! Keep your labbook (paper or electronic) up-to-date and write down everything, you can never have too much information.

Reference managers. A reference manager is a software tool that you can use to collect, store and organise your references. Certain tools allow you to also attach PDFs which you can annotate, meaning you can build your own personal library of science! Often these can be linked to LaTeX and Microsoft Word which allows for you to directly import and format your references without manually formatting each one (though you should double check them as it is not unusual for small errors to appear). Two of the more popular tools are Mendeley and EndNote which both have their advantages and disadvantages.

Talk about your work. Your work is exciting and novel, talk about it! Explaining your work to peers both in and outside of your field will teach you how to express
and convey your ideas in a coherent manner. Take advantage of group talks/PG seminars/conferences/poster sessions/sound bite competitions etc. and use these platforms to practicing explaining your science to different audiences. This experience will be invaluable when you begin to draft out your chapters.

4.1.2 Writing your thesis

Writing your thesis is a big task, there is no way of hiding that. However, it does not have to be (and should not be) as intimidating as it is made out to be, and here are some ways of mitigating that.

Prepare prepare prepare. Sit down and make a detailed structure of your thesis. Start with chapters (experimental ones are easier to start with as they are your direct area of expertise!), then divide into sections. For each section list out what are the key points that your reader needs to take away. Use subsections to build a narrative inside each section. Take your time with this - having a comprehensive structure in place will turn your thesis from a daunting challenge to a daily chore. Most importantly, its 100% fine to change/rebuild your structure as you write!! Be open to change and flexibility!

Build a story. Your thesis chapters should standalone in terms of their content but should all contribute to an overall narrative. Imagine you explaining your work to someone - you want to tell them a story not bombard them with information. Think about mapping out flowcharts for your chapters and the overall thesis, or even storyboards!

Write or don’t write. Having a structure in place means you can take a small subsection and make that your goal for the day/week. However, there will be days when you can’t face your thesis again. On these days its best to put it to one side and do something else - have fun, do different science, anything! Don’t think of it as wasting time, think of it as improving your overall efficiency.

Editing is easier than writing. When you are writing, make sure you write something. It won’t be perfect, it will need changing and possibly will get thrown out but make sure to put those ideas on paper. It is so much easier to edit text than it is to generate it! When you’ve written something, put it to one side, write something else, then edit with a fresh view. Try to avoid getting attached to certain phrases (e.g. the word “interesting”).

Ask for help. Get people to read your writing for feedback. Ask for things such as 1) does this structure make sense, 2) what was not clear, 3) what seemed unnecessary and 4) spelling and grammar. If possible, ask people in advance and don’t throw whole chapters at them (unless they ask for them!) at a time. Its good to get the opinions of people both in your field and outside as your examiners are not guaranteed to both be directly in your area. And remember, cake is an incredible motivator!

Sell your work. Don’t sell yourself through, it is easy to underestimate what you have accomplished during your PhD. Indulge in a small amount of self-flattery (just a sprinkling!) and be confident in your writing tone - you are the expert in this work.
**Take time for you.** Go to the gym/make food/see friends/have hobbies. Your thesis should not take over your life. Don’t let it!

### 4.1.3 The viva

Once you’ve submitted your thesis, make sure to take some time for yourself - this is a big accomplishment and you need to recover from it! The viva is the last big step (apart from corrections) in your PhD journey and is typically a month or two after initial submission. Go through your work and find those small corrections you inevitably missed in your writing/editing (but don’t change anything before your viva). Also, take a copy of your thesis in with you to make notes in during your viva. Talk to other people about their vivas and how they prepared but the best thing you can remember is that you are the expert in your work not your examiners. Typically, the viva is there for them to ask you questions as they are interested in your work! Enjoy it!
4.2 Thinking ahead to jobs

A good place to learn more about the jobs you can do after you complete your PhD is the Academic and Non-academic Career (Science, Engineering and Medicine) Workshop, which should take place sometime in Term 2/3 and is run by SkillForge. This is a good workshop to attend even if you are in your first year, since it gives a good, broad overview of both academic and industry jobs, allowing you to start preparing your CV in advance.

The day is split into two parts, each part focusing on academic and industry jobs separately, so you could attend only one of those sessions, but I would personally recommend attending both. The slides from 2019 session on academic jobs can be found [here].

The Careers’ Service at University of Warwick is also a good point of contact. They routinely organise career events where you can meet potential recruiters. You can book one-to-one appointments to discuss the career options available, or go over your CV or even do some interview practice. They also organise skills workshops, as well as provide help with work experience.

Once you think you know what kind of job you want to look for afterwards (eg academic vs non-academic), it can be worth thinking about what to spend your time on based on this. For instance, if you plan to look for an academic job, presenting at conferences and publishing papers are more important than they are if you intend to leave academia. If you plan to find a non-academic job, try to think about ways to build up skills useful for the kind of work you want to do.

Remember that lots of recruiters are interested in hiring postgrads, but don’t necessarily know the best ways to find us, so it is worth searching around. By the same token, potential employers don’t necessarily understand academia and they don’t necessarily know what a PhD involves, so finding ways to communicate the skills that you’ve developed in ways that they will understand is important. (For instance, most PhD roles are quite self-led, giving students a great deal of experience in project management.)

There is a [group on Facebook] for careers in Europe aimed at Warwick students.

STFC-funded students can apply for the [Policy Internship] in which you would spend three months working with Parliament or Government.
4.3 Other useful links

- **Warwick SU societies** organise around a whole range of sports and social activities. There are a number of liberation societies including Warwick Pride, Warwick Enable, Warwick Anti-Racism Society, and Warwick Anti-Sexism Society.

- There are regular meetings of committee groups for [Women in Physics](#) and the [Athena SWAN](#) (gender equality) group. In the near future there may be a BAME committee as well.

- The [Warwick LGBTUA+ Supporter Network](#) lets you show your support for LGBTUA+ people, join a mailing list for related events, and get a free bag of goodies.
5 Group Specific Sections

5.1 Astro

5.1.1 Who’s who

You can find everyone’s webpage here [https://warwick.ac.uk/fac/sci/physics/research/astro/people/](https://warwick.ac.uk/fac/sci/physics/research/astro/people/), but for quick reference of who does what, see below:

**Academics** Exoplanets: Armstrong, Bayliss, Brogi, Pollacco (also satellites), Veras (also theory), West, Wheatley
Disks: Kennedy, Meru
White Dwarfs: Gänsicke, Marsh, Tremblay
Extragalactic/transients: Stanway, Steeghs (also White Dwarfs)

**Postdocs** Exoplanets: Brown, Gill, King, Louden, McCormac, Wilson
White Dwarfs: Gentile Fusillo, Green, Hollands, Manser, Toloza
Extragalactic/transients: Gompertz, Lyman, Wiersema
Telescopes r us: Chote, Ulaczyk

**Postgrads** Exoplanets: Battley, Bryant, Cooke, Foxell, Jackman (also the Carrington Event), McCleery, Osborn, Webb
Disks: Cronin-Coltsmann, Rowther
White Dwarfs: Cukanovaite, Cunningham, Hoskin, Outmani
Extragalactic/transients: Childs, Chrimes, Cutter (also disks)
Other: Ashley (binaries), Blake (satellites)

5.1.2 Places to know

Physical Sciences is an old maze of a building and we have nicknamed most important places. Here are some you should know:

- **PS0.16 “The Green Mile”** - the open corridor area, protected by the key-card doors. It’s green. Through here you find the back office and some academics’ offices.

- **PS0.16F “The Back Office”** - the open-plan communal office area through the green mile. A lot of exoplanet people are in here.
• **PS0.17 “The Fishbowl”** - this is the downstairs seminar room.

• **PS0.18 “The MPAGS Room”** - a smaller classroom, primarily used for MPAGS classes.

• **PS0.19 “The Cave”** - our downstairs common room/kitchen.

### 5.1.3 Astro-specific events

We have a number of astro-specific events, both academic and social. A round up of all these events, plus Physics-wide events, are displayed on the calendar at the end of this section. More details on each event are given below.

#### Seminars

- **Weekly Astronomy Seminar** [*Wednesdays during term time, PS1.28 1400-1500, followed by coffee with the speaker from 1500-1600 in the common room next door*]: you will get a weekly email prior to these seminars with details of who is speaking and their talk abstract. These seminars are given by invited speakers, usually external, and all astronomy staff and students are encouraged to attend. They are on a whole variety of topics within Astronomy/Astrophysics and will broaden your general knowledge. Afterwards, coffee and biscuits are provided in the common room next door, and there is a private session between the speaker and postgrad students where we can ask questions without other academics present.

- **Habitability Seminars** [*approximately monthly, at various times and locations*]: you will be emailed by Dave Armstrong, the seminar convener, prior to these taking place with details of who is speaking and their talk abstract. These seminars are multidisciplinary, with internal/external invited speakers from all kinds of departments, talking about a variety of topics under the broad theme of habitability. Anyone is allowed to attend, regardless of department or status within the uni.

#### Group Meetings

Each group within Astro has their own meeting once a week to discuss the latest developments, and to give paper and work talks.

- Exoplanet meeting: Tuesdays 11am-12pm PS0.17
- White Dwarf meeting: Mondays 11am-12pm PS0.17
- Extragalactic meeting: Thursdays 1-2pm PS0.17
- TESSpresso (meeting for anyone working on/interested in TESS data): Thursdays 11am-12pm PS0.17, you can email Dave Armstrong to be put on the email chain if you aren’t on it.
Extracurricular

- **Journal Club** [Last Monday of each month, 1.30-2.30pm]: an informal environment to critique papers without the looming experience of an academic. You can find more info here: [https://warwick.ac.uk/fac/sci/physics/current/postgraduate/pg-sslc/astro_journal_club/](https://warwick.ac.uk/fac/sci/physics/current/postgraduate/pg-sslc/astro_journal_club/)

- **Planetarium** [Various dates/times]: The Astro group owns an inflatable mobile planetarium which frequently visits schools for outreach and engagement. We’re always looking for new volunteers to help out with visits! The planetarium organisers (Matt Hoskin and Ares Osborn) will send around a spreadsheet schedule where you can note down your availability. More information about the Planetarium can be found here: [https://warwick.ac.uk/fac/sci/physics/outreach/planetarium/](https://warwick.ac.uk/fac/sci/physics/outreach/planetarium/)

Socials

- **Friday Pub** [~1700, The Dirty Duck]: most Fridays, we head down to the Dirty Duck after work to eat, drink, and play board games.

- **White Dwarf Pub** [16:00, Varsity]: Every other Thursday we head over to Varsity with whoever in the white dwarf group is around. We usually sit for an hour or so with a pint or two, and often people will also get some food there when the academics leave.

- **Film Nights** [~every once in a while, the Cave]: our “Official Film Rep” within Astro organises film nights occasionally. We suggest movies on a theme picked by the rep (on the whiteboard in the Cave), vote on these democratically during a lunch break, and then doodle poll the best evening. Once in a blue moon we also run Anime film night and Horror film night.
5.1.4 Observing

Many astro students have opportunities to go observing during their PhD. Some projects will lend themselves to this more than others, but if you are interested, there will generally be somebody in the department looking for volunteer observers (Tom and Boris are generally good people to talk to about this). There is also the possibility of obtaining your own telescope time by writing proposals, however this varies greatly from project to project, so don’t feel like you are missing out by not writing one.

For your first observing trip, it is likely that you will be trained by someone that has already used the instrument or telescope. If they haven’t discussed the trip beforehand, it is useful to have a rough idea of what you will be doing before getting there. E.g. For spectroscopy on the William Herschel Telescope (WHT) using the ISIS spectrograph, multiple people have checklists for how to take all the calibrations you need, what commands to run and what to observe. It is worth working out a time for both you and either (i) the person training you, or (ii) the person who you are collecting data for, to sit down and go through everything you need to do.

While at the observatory, it is almost certain that you will have a supporting astronomer and/or telescope operator with you. They will be able to help start up on the first night until you are familiar with the systems, and also incase there are any questions you have during the run (e.g. ”I forgot what command to use to take multiple observations.”/”How do I use IRAF to see my observations?”).

Generally a weeks worth of observing can be done on hand luggage, but it may be worth bringing a hold-luggage suitcase the first time if you feel that hand luggage will not be enough. John Southworth at Keele keeps a pre-observing checklist which can be a useful resource to check through before you leave, or to check what kinds of things you will need (not all of these are needed, e.g. Pen knife).

If you are travelling to La Palma, James McCormac has set up a payment scheme to allow the observatory to bill Warwick directly (rather than you needing to pay and claim the money back). Details are here.

5.1.5 Conferences

An up-to-date list of astronomy conferences is kept by the Canadian Astronomy Data Centre. Keep an eye out here for useful conferences.

5.1.6 Astro-specific careers information

The number one place to look for astronomy jobs is the AAS Job Register. Almost all jobs that come available (technical, post-doc or academic) will be advertised here. If you’re considering staying in academia, it’s worth looking at this website periodically even before you start job hunting, to get an idea what kind of jobs there are around.

The Isaac Newton Group of Telescopes runs a studentship program for PhD students. Students on the program spend one year working at the La Palma observatory in the Canary Islands, where their duties include supporting astronomers who are observing there. They take four students per year from the UK, Netherlands and Spain. Applications can be competitive, but the experience is useful and looks good on a CV if you are applying for astronomy jobs (everybody wants skilled observers). If you are interested, talk to your supervisor or one of the several Warwick people who did the project already.