WELCOME TO

The Scottish Doctoral Training Centre in Condensed Matter Physics

An EPSRC Centre for Doctoral Training in Condensed Matter Physics

Monday 3rd September 2018
1. CM-CDT: CONTACTS

The CM-CDT is run, in collaboration with its Management Group, by the following members of staff:

<table>
<thead>
<tr>
<th>Photo</th>
<th>Name</th>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
</table>
| ![Photo](image1) | **Professor Ian Galbraith**  
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CM-CDT, Heriot-Watt  
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| ![Photo](image2) | **Dr Chris Hooley**  
Director of Operations  
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| ![Photo](image6) | **Debra Thompson**  
Information Technologist/Administrator  
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01334 463102  
dmt4@st-andrews.ac.uk | | |

The Manager is the key contact for any strategic and financial issues related to the Centre. The Information Technologist / Administrator is the main day-to-day contact for students and for information relating to training courses / course credits, public engagement and the website. However students are also free to contact the Director or the Director of Operations at any time. Further information, including a full list of CM-CDT supervisors and our Industrial Associates, may be found on our web pages.
The CM-CDT operates in partnership with the Scottish Universities Physics Alliance (SUPA), and the Universities of Edinburgh, Heriot-Watt and St Andrews. It is partly funded by the Engineering and Physical Sciences Research Council (EPSRC). The website addresses for all these are as follows:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Web address</th>
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<tbody>
<tr>
<td>CM-CDT</td>
<td><a href="http://cm-cdt.supa.ac.uk">http://cm-cdt.supa.ac.uk</a></td>
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<tr>
<td>SUPA</td>
<td><a href="http://www.supa.ac.uk">http://www.supa.ac.uk</a></td>
</tr>
<tr>
<td>Heriot-Watt University – Physics Department</td>
<td><a href="http://www.phy.hw.ac.uk">http://www.phy.hw.ac.uk</a></td>
</tr>
<tr>
<td>University of Edinburgh – School of Physics &amp; Astronomy</td>
<td><a href="http://www.ph.ed.ac.uk">http://www.ph.ed.ac.uk</a></td>
</tr>
<tr>
<td>University of St Andrews – School of Physics &amp; Astronomy</td>
<td><a href="http://www.st-andrews.ac.uk/physics">http://www.st-andrews.ac.uk/physics</a></td>
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<tr>
<td>EPSRC</td>
<td><a href="http://www.epsrc.ac.uk">http://www.epsrc.ac.uk</a></td>
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2. CM-CDT: TAUGHT COURSES AND OTHER ACTIVITIES

Affiliation
As a student in the CM-CDT, you have a “home institution”: Edinburgh, Heriot-Watt, or St Andrews. This is the institution at which you are registered as a PhD student. It is also usually where your principal supervisor is a member of staff. You are classified on entry as “experimental” or “theoretical”; this classification determines which taught courses are compulsory for you. However, we encourage our students to develop broad interests in condensed matter physics, so please don’t feel limited by this pragmatic division.

Lecture programme
CM-CDT students have access to a wide range of graduate-level lectures in all areas of physics, delivered via the SUPA video-linking system. There is also the possibility of attending non-SUPA courses: for example, relevant undergraduate courses at your home institution, or graduate-level courses in schools other than physics. You should have received your username and password for “My.SUPA” which will allow you to view and register for courses on the SUPA website. If you have any problems accessing this site please contact SUPA Administration at Admin@supa.ac.uk.

Some courses are normally compulsory for theoretical students: these are said to constitute the “theoretical core” and are marked “T” on the list on our web site. A different but overlapping list of courses are normally compulsory for experimentalists: the “experimental core”, marked “E”. In exceptional circumstances – for example, if you have already covered strongly overlapping material as part of a previous qualification – these may be substituted with others. Such exceptions must be negotiated with your Research Supervisor and the Operations Director. The core lectures available for the academic year 2018/19 are on the CM-CDT website.

Each course has associated with it a certain number of CM-CDT credits. A list of credits associated with the most commonly chosen courses is included with this induction information and further information may be found on the CM-CDT website. The framework for the calculation of CM-CDT and skills credits is included as Appendix 1. Credit
allocations for other courses and activities (including SUPA courses outside the core or non-SUPA courses) will be made by the Director of Operations; please include details of the course in your ‘Credit summary’ document as per the instructions in the induction pack (Appendix 3) and return to the Information Technologist / Administrator (including the programme and any other relevant information, e.g. web-link or attachment) for confirmation of credits allocated.

You should determine your programme of courses in consultation with your supervisor, seeking advice from the Operations Director wherever appropriate. Please remember when planning your course programme that some courses only run every other year. Your choices are subject to the following rules:

- we require you to take at least 160 CM-CDT credits of courses in total over the first two years of your studentship. Please note, however, that summer schools (both internal and external) often carry CM-CDT credits, so this does not usually mean that you will need to take 160 credits of semester-time courses.
- you must normally take all courses in the relevant (theoretical or experimental) core.
- you should not exceed 240 CM-CDT credits.

You should aim to enrol as early as possible on your chosen taught courses as some have limitations on capacity, and My.SUPA does close enrolment a few weeks after the start of the semester. Late enrolment can be arranged in exceptional circumstances; please contact the Information Technologist/Administrator to request this.

Please note that when you register for a taught course, you should aim to attend all lectures. If you know in advance that you’ll be unable to attend, please notify the lecturer of this in advance of the lecture(s) affected, and explain your reasons. All coursework should be presented by the deadline given, unless a specific arrangement for an extension has been agreed in advance with the lecturer.

Skills training
An important aim of the CM-CDT is to produce well rounded students, both in terms of academic education and in terms of transferable skills. The CM-CDT offers its students many forms of skills training; you are required to obtain 35 skills credits in such training (which equates to about 105 hours of training) over the course of your four years with us. Here are some examples of activities that could count towards this total:

‘In-house’ skills training
This can be provided by the host institutions’ graduate training programmes:
- CAPOD (St Andrews)  http://www.st-andrews.ac.uk/capod/
- IAD (Edinburgh)  http://www.ed.ac.uk/schools-departments/institute-academic-development
- Research Futures (Heriot-Watt)  https://www.hw.ac.uk/research/ald/develop/research-futures-student-workshops.htm
- Heriot-Watt Business School courses  https://www.ebsglobal.net/

Other skills training resources
- Online training courses
- EPCC courses  https://www.epcc.ed.ac.uk/education-training
- Workshop training (at Heriot-Watt University)
- “Advanced Central Facilities” courses (e.g. at ILL, ISIS, etc.)

**Attendance at departmental colloquia**
You are expected to attend the colloquia offered by your host institution. You should record dates and titles of the colloquia you attended and include this in the ‘Credit summary’ document (as per the instructions in Appendix 3) and return to the Information Technologist / Administrator for validation. Please note the distinction between a research seminar, which gives specialist information in the same field of physics in which you are doing your PhD, and a colloquium, which is meant to provide more general background to subjects beyond your own field: skills credit is available only for the latter. Lists of colloquia are provided by each of the three University departments.

**Public Engagement activities**
All CM-CDT students are normally expected to take part in public engagement. The guideline amount of public engagement activity is 24 hours per year over your first two years. For those students who are less enthusiastic about the face-to-face public engagement activities, the public engagement credits can be achieved by contributing to the public engagement magazine, taking part in “back- office support” for the sessions, participating in online activities, and other options. Please contact your local CM-CDT student public engagement coordinators for more information. [http://cm-cdt.supa.ac.uk/public_engagement/index.php](http://cm-cdt.supa.ac.uk/public_engagement/index.php)

**Please note:** If completing the Disclosure Scotland Form through your host institution, you must include the information that you will be involved in public engagement projects in schools and events aimed at children aged 11 and above.

**Teaching**
Participation in undergraduate teaching helps to develop both your depth of understanding of physics, and the transferable skills associated with communicating it to an undergraduate audience. The CM-CDT therefore requires that its students make themselves available to assist with departmental teaching. The guideline level is 48 hours (including preparation and marking time) per year in each of the first two years. You will be paid for this teaching by the department for which you undertake it, which will usually be your home department.

**External Courses and Conferences**
To enquire whether a particular course or conference is eligible for CM-CDT or skills credits, please contact the Information Technologist / Administrator, who will raise your query with the Director of Operations. Make sure you include a copy of the programme and any other relevant information about the course. Attendance at a research conference doesn’t carry credit unless you present a poster or give a talk there.

**Course Credit summary**
A course credit summary will be created and emailed to you. The instructions on how you should complete this summary and return to the Information Technologist / Administrator for validation are included in Appendix 3. It is essential that you record all activities (taught courses, presentation of a talk or poster at conferences and events, skills training and teaching) that you take part in so that credit can be allocated and validated.
**Annual assessments**
Details of your annual postgraduate assessment (which forms part of the first-year assessment) will be advised to you by your host institution.

In addition to this, you will be assessed by the CM-CDT at around the 18-month point via the 'spring assessment,' which for cohort 10 will take place in spring 2020. The assessment takes the form of a poster session and brief face-to-face interview. Your poster should describe the current state and likely future direction of your research – it should not be just a literature review or a summary of the work of others in your group. A panel of two/three assessors will visit your poster and will question you about its content and about the progress of your research more generally.

Any progress vivas in later years will follow the rules of your home institution, but with input from the CM-CDT on your taught course, skills, public engagement and teaching credit attainment.

**3. CM-CDT: FINANCES**

The main point of contact for all financial matters relating to the CM-CDT is the Manager.

**Fees and stipend**
The CM-CDT pays its students’ postgraduate tuition fees to the relevant institution(s). We also pay a maintenance stipend, which for the academic year 2018/19 is £14,777. Stipend payments usually increase from year to year to keep pace with inflation. While the figures for future years are not yet confirmed, we will pay the EPSRC standard postgraduate rate.

Details of stipend payments (e.g. payment dates and payment method) vary depending on the host institution. Please contact your local Postgraduate Secretary / Administrator for details. Payment of a stipend stops either at the end of your 4-year funded period though it is possible to continue to receive your stipend up to the end of the quarter after you have submitted, if you are continuing with research relevant to your thesis and you have submitted before your end date (48 months maximum period of funding). So for example, if your end date is end of August, you can submit as early as 1st July and still be paid up to your end date or viva date (whichever is first), as long as you are still doing research relevant to your thesis. Financial quarters are: January – March, April – June, July – September, October - December.

Stipend can also be temporarily suspended, for example due to an industrial placement. Any such suspension of study requires prior agreement with the Manager and with your host institution.

**Expenses**
Each CM-CDT student is allocated an expenses budget of £10,000 for the four-year period. This allows you up to £2,500 per annum for on-going training and development costs. This is to cover travel, accommodation and subsistence costs relating to conferences, summer schools, training courses, workshops or academic visits to other institutions. Items such as Institute of Physics membership fees can also be claimed against this. Attendance at any of these should be discussed and approved by your supervisor in advance of making any bookings.

In addition each university has agreed to provide a start-up grant of up to £1,000 for the purchasing of computing equipment, e.g. a laptop computer. Details of how to spend this will be made available by your local PG secretary.
Please note:
1. The budget may not be used to purchase laboratory equipment or consumables. The expectation is that these should be provided by your research supervisors.
2. IT equipment and software and other items purchased by a CM-CDT student through their start-up / annual grant do not belong to the individual but are the property of EPSRC or their host university.
3. To make a booking, e.g. for a conference or to purchase airline tickets or IT equipment, you must adhere to the policy of your home university. This means, in particular, purchasing through the agreed suppliers and completing the necessary purchase orders / expense claim forms. For further information on this process you should contact the relevant Postgraduate Secretary / Administrator in your home institution.
4. When claiming expenses original receipts must be submitted and proof of payment shown. Payment cannot be made on the basis of photocopies or items such as boarding passes.
5. When your 4-year funded period ends your budget account is closed and any unspent funds are returned to the CM-CDT, who will re-use them to support other PhD students.

It is the responsibility of your home university to ensure that your spend against this budget is approved and monitored. Your home university will keep records of the expenses claims, purchase orders and receipts for audit purposes. The money can be used for any reasonable CM-CDT-related purpose; if you are in doubt about whether a particular purchase is eligible, please check with the Manager before spending any money.

**Note:** We do not want to restrict you precisely to your annual budget, but would rather give you the flexibility to plan and use it in whatever way will most benefit your studies. Please keep a record of your own spend and use this to monitor and plan any over- or under-spending. You can compare your own records with the actual record of your spend against budget which will be kept by the Postgraduate Secretary / Administrator at your home university and issued twice per year. If you anticipate under- or over-spending by more than 20 per cent in any one year, we would ask that you discuss this, before the spend, with the CM-CDT Manager.

**4. CM-CDT: OTHER INFORMATION**

**You should complete your PhD within 4 years (including writing up and submission).**
You will be contacted by the CDT Manager at various points during your final years to comment on your progress towards this target, and in your final year you and your supervisor will both be asked to estimate a likely submission date. If, for any reason, you come to suspect that you’ll be unable to complete your PhD within 4 years, you should discuss this with your supervisor at the earliest opportunity, as well as notifying the CDT office directly.

**Residential courses and CM-CDT summer schools**
As well as those courses offered through SUPA, there will be occasional intensive residential courses for CM-CDT students on selected topics.

One example is the Probes Course being held at the Firbush Outdoor Centre near Killin from 18 -22 March 2019 (details still to be confirmed), which (since it is a core CM-CDT course) all first- and second-year students will be expected to attend. Other examples include workshop training at Heriot-Watt and ‘software carpentry’ at EPCC in Edinburgh; attendance at these is optional.
CM-CDT Website
The CM-CDT has its own website: http://cm-cdt.supa.ac.uk/. This provides information on taught courses, research projects, training and events and key contacts. Our students play a role in the development of the site, and in keeping it up to date. This involves providing photographs and other information, but also broader participation (through the CM-CDT Group Meetings) in determining the web site’s content and focus. This provides valuable skills, as well as ensuring that you are fully involved in determining how the CM-CDT is presented to the world.

Industrial Associates
The CM-CDT is proud to have over twenty-five Industrial Associates. Representatives from these organisations speak at Group Meetings and Careers events, run workshops, and are involved in transferable skills training. They also play a key role in the CM-CDT’s programme and Advisory Board.

All of our students have the opportunity of applying for a placement with Industry. These can range from short placements (3-4 weeks) to longer ones (3 months), and, subject to negotiation, your funded PhD registration period can be lengthened accordingly. The list of Industrial Associates can be found at http://cm-cdt.supa.ac.uk/industry/index.php. There is no fixed deadline to apply for a placement; students are encouraged to contact the Manager at any time to discuss options. In addition there are also opportunities for placements with Central Facilities and Academic Partners.

Funding will not normally be provided for visits to universities, research institutes, or experimental facilities, even if a student is learning a research skill beyond that required for their PhD.

In line with the CM-CDT grant funding, if a student leaves their PhD studies to go on a placement then their stipend may be suspended and other means of funding will be required in order that the student doesn’t face financial hardship. Examples of funding options:

a) If a student is on a placement which is less than three months and they are not intending to request an extension to their PhD term then no changes will be made to their stipend payment. They will continue to be paid, but only up to the full 48 months of their contract.

b) If a student secures a placement for 3 months and they intend to request an extension please contact your DoPG.
Students interested in taking up an Industrial Placement are encouraged to speak to colleagues who have already undertaken a placement. Details of some past placements are available on the News section of the website.

**Logos, and their use on posters and in publications**
Copies of current logos, for use on posters and in publications, are available on the CDT website ([http://cm-cdt.supa.ac.uk/internal/index.php](http://cm-cdt.supa.ac.uk/internal/index.php)). Students are asked to include (in this order of priority):

- Home institution logo > EPSRC logo > CM-CDT logo > SUPA logo.

The formal EPSRC title ‘EPSRC Centre for Doctoral Training in Condensed Matter Physics’ should appear on all of your materials.

**Acknowledgements on posters and in publications**
It was previously acceptable to acknowledge the CDT on your posters and in your publications in a relatively informal way (i.e. mentioning it by name only). Now, however, EPSRC is using the data collection tool ‘researchfish’ to monitor our progress. As part of this, and other reporting requirements, it’s now necessary to include all relevant grant references in your acknowledgements. For the CDT, the relevant grant codes are as follows:

- For students in cohorts 6, 7, 8, 9 and 10 the CDT grant code is **EP/L015110/1**.
- For students in cohorts 5 and earlier, the CDT grant code is **EP/G03673X/1**.

You may wish to include this information via a phrase such as the following:

**“X, Y, and Z acknowledge studentship funding from EPSRC under grant nos. A, B and C respectively.”**

Note that, depending on the funding arrangements for your research project, you may also be required to acknowledge other funding, e.g. from relevant (EPSRC or non-EPSRC) research grants, from your host University, or from elsewhere.

**Inter-site transport**
The CM-CDT encourages students and staff to travel between the three host institutions, not just for officially organised meetings but also to collaborate on problem sets for the courses or to explore research ideas together. For officially organised meetings, the CM-CDT will usually make the transport arrangements centrally.

For other inter-site transport, the options are:
- to use your own car;
- to use a rented vehicle; or
- to use public transport.
You may need to complete an insurance form through your home university. This should be done annually, and it is your responsibility to ensure that it is current. Rented vehicles, if required, should also be arranged through your home university. From time to time and for group travel minibuses can also be arranged – please contact the CM-CDT office to enquire about this. Costs of fuel or public transport incurred on CM-CDT business will be reimbursed via the postgraduate secretary / administrator in your home university.

Communication and information exchange
One of the key factors in the success of our organisation is communication and information flow. The staff at CM-CDT are committed to keeping students informed of all developments within the organisation and will give you support and advice on all matters whether academic or skills-related. **To ensure successful communication, please answer all email requests from the Centre promptly, and if a date for reply is given, please comply with it.**

In addition we are committed to developing strong contact links and information transfer between the CM-CDT and collaborating Universities, Research Supervisors, organisations such as SUPA and EPSRC, our Industrial Associates, and Doctoral Training Centres UK-wide.

For the CM-CDT to be successful in these areas we need your help. Please keep us up to date with the following:

- your training and development, completing details of the courses, conferences, and activities in which you are taking part on your credit summary and returning these on the dates requested;
- copies of any posters or talks that you present at conferences;
- ‘good news stories’: a short report (with photographs) on a particular conference / event that you enjoyed for the CM-CDT newsletter / website;
- details of published papers on which you are a co-author.

We also need your participation in projects and other processes, and to be kept informed of any good contacts you make / courses or conferences you find that could be shared with others. Finally we would also ask that you advise us of any issues you may have or any improvements that you think we could make.

**Absence**
If you will be absent from your normal place of study for more than 3 weeks (e.g. due to illness, to travel, or after submission of your thesis), you should send an email to the CDT office (cm-cdt@supa.ac.uk) to state:

- brief reason for absence;
- estimated date of start of absence;
- estimated date of return, if known;
- confirmation that your email will be regularly checked (e.g. once per week); or, if this is not possible, details of alternative means of making contact with you.

This requirement is in addition to whatever local rules apply for granting of absence from your home institution.

**Sick Pay**
Students who require time off due to illness are eligible to receive up to 13 weeks stipend in any 12 month period. You must provide a Fit note (or ‘sick note’, available from your GP) and notify your DoPG, the Ops Director and the Manager.
Group Meetings
CM-CDT Group Meetings are usually held on a monthly basis, sometimes face-to-face or otherwise by videoconference. Students in their first and second years must attend each group meeting, unless they are granted permission (in advance) to be absent. Students in their third and fourth years are also welcome to attend, and may be asked to present on a specific project.

Two or three times a year CM-CDT events will be held (Retreat, Careers Event or Group meeting with speaker / cohort-building activity). All cohorts are expected to attend these.

A copy of the meeting guidelines is attached (Appendix 2).

Equality, diversity, and inclusion
The CM-CDT values the diversity of the centre and aims to make everyone feel welcome. We positively promote fair treatment for everyone, irrespective of age, disability, gender, sexual orientation, gender reassignment, relationship status, pregnancy, maternity or paternity, caring responsibilities, race, religion, or belief. We do our best to ensure that equality is embedded in all our operations and activities, and periodically review our policies, procedures, and publications to make sure that they are aligned to this goal. If you have any queries or suggestions for improving equality, please contact the Operations Director or Manager. Please see the ‘Diversity’ page on the CDT website for more information. [http://cm-cdt.supa.ac.uk/Diversity/index.php](http://cm-cdt.supa.ac.uk/Diversity/index.php)

CM-CDT students spending research time away from their home institution
Students may know at the beginning of their studies that they will spend time at a different research institution (e.g. an MPI or CASE studentship) or it may become apparent during their studies that this would be useful or necessary (e.g. their supervisor moves). In either case, rules apply, and a copy of the guidelines for students studying away from their home institution will be sent to the student by the Manager.

Support and Advice
The CM-CDT has its own pastoral support network. If you are having problems of any sort – academic or not – we would encourage you to get in touch as early as possible. The points of contact within the CM-CDT for pastoral support are

- Ian Galbraith, Heriot-Watt (i.galbraith@hw.ac.uk, 0131 451 3066);
- Erika Andersson, Heriot-Watt (e.andersson@hw.ac.uk, 0131 451 3653);
- Brendon Lovett, St Andrews (bwl4@st-andrews.ac.uk, 01334 46 3107);
- Donatella Casettari, St Andrews (dc43@st-andrews.ac.uk, 01334 463186);
- Rosalind Allen, Edinburgh (rallen2@ph.ed.ac.uk, 0131 651 7197);
- Paul Clegg, Edinburgh (paul.clegg@ed.ac.uk, 0131 650 5295).

Please don’t hesitate to give any of them a call or send them an email.

In addition to these, each university has its own student support office. These offices aim to provide students with help, support and focus over the course of their postgraduate studies. Below are the details for the student support website pages and offices covering the three universities within the CM-CDT. Home-university pastoral support is available from:
University of St Andrews
http://www.st-andrews.ac.uk/students/advice/
   The Advice and Support Centre (ASC)
   79 North Street
   St Andrews
   KY16 9AL
   Tel: +44 (0)1334 462020
   Email: theasc@st-andrews.ac.uk

University of Edinburgh
https://www.eusa.ed.ac.uk/support_and_advice/the_advice_place/
   Potterrow Reception
   Edinburgh University Students' Association
   5/2 Bristo Square
   Edinburgh
   EH8 9AL
   Tel: 0131 650 2656
   Email: advice@eusa.ed.ac.uk

Heriot-Watt University
https://www.hw.ac.uk/services/student-service-centre.htm
   Student Service Centre
   Heriot-Watt University
   Hugh Nisbet Building
   Edinburgh
   EH14 4AS
   (On-campus students can find us in the Hugh Nisbet Building, opposite the shop.)
   Tel: +44 (0)131 451 3000
   Email: studentcentre@hw.ac.uk

Appendices
Appendix 1 – Framework for the calculation of CM-CDT / Skills credits
Appendix 2 – Meeting Guidelines and Procedures
Appendix 3 – Credit summary template and completion instructions