



Advanced Laboratories

Welcome!



School of Physics move to Beech Hill

We have moved to
Beech Hill!

From September 2023 the UCD School of Physics has relocated to Beech Hill while the Science Phase III upgrade is in progress.

 Information and Directions

[Direct link - opens in Google Maps >](#)



The UCD School of Physics has relocated to the L.M.I. Building in Beech Hill from September 2023 while the Science Phase III upgrade is in progress. This building is just beyond the edge of campus, less than 200 m from UCD Nexus.

You can get further details from the Advanced Laboratory website:
https://physicslabs.ucd.ie/info/beece_hill/



School of Physics move to Beech Hill

- We have just moved to Beech Hill, so there will be some teething problems – be patient!
- Initially, building will be closing at **18:30**, so you must leave by then.
- Please let us know if there are any issues with schedules and commuting between UCD main campus and Beech Hill.





School of Physics move to Beech Hill

No Physics Library or common room space in Beech Hill.

You will be able to use B106-BH as your base:

- Microwave and kettle available at end of room
- Must make sure that room is kept clean / no strong smells
- At end of day, chairs must be left ready for next day's lectures





School of Physics move to Beech Hill

Points of contact:

- Main Office (B109–BH)
- Bairbre Fox, School Manager (A109–BH)
- Prof. Sokell, Head of School's Office (A108–BH)
- Dr. Ian Mercer, Stage 3 teaching Team coordinator (Science South 0.009)





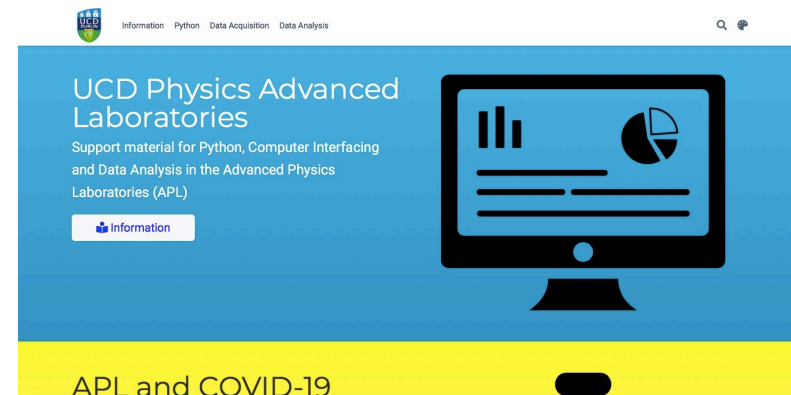
Advanced Laboratory Introductory Session 2022/23

Laboratory Philosophy:

- Educational environment
- Interaction with staff & demonstrators is important
- Work must be your own (plagiarism) – if a report is found to be plagiarised from another one, this will be investigated and could result in **both** reports being marked as zero.

WEBSITE FOR ADVANCED PHYSICS LABORATORY

<https://physicslabs.ucd.ie>



Laboratory Modules

Module	Name	Credits	Laboratory Hours	Module Coordinator
PHYC30170	Astronomy and Astrophysics Lab I	20	12 hrs/wk.	John Quinn
PHYC30300	Advanced Laboratory I	20	12 hrs/wk.	Emma Sokell
PHYC30310	Advanced Laboratory I (Joint)	10	6 hrs/wk.	Luis Leon Vintro
PHYC30320	Advanced Laboratory I (TP)	10	6 hrs/wk.	Luis Leon Vintro

All these modules are year-long.

Study Abroad Laboratory Modules

Module	Name	Credits	Laboratory Hours	Module Coordinator
PHYC30360	Study Abroad Physics Labs (10)	10	12 hrs/wk.	Tom McCormack
PHYC30370	Study Abroad Physics Labs (5)	5	6 hrs/wk.	Tom McCormack

Study Abroad Laboratory Modules must be completed in either trimester.

Laboratory Times

- Labs run for 12 weeks starting today
- Main Laboratory (with demonstrators):
Tues., Weds., Thurs. 2-6pm.
- Labs open from 11am on these days.
- You should be working on lab activities at all timetabled hours unless you have a class.
- Sign in and out (google sheet.)
- ***Trimester 2, labs will be open in the field trip weeks and will close on Thursday 28th March.***



Advanced Laboratory Introductory Session 2021/22

Staff:

- Module coordinators:*
- A.P. Quinn (PHYC30170)
 - Prof. Sokell (PHYC30300)
 - A.P. León Vintró (PHYC30310/30320)
 - Dr. McCormack (PHYC30360/30370)

- Other staff involved:*
- Dr. Hayden
 - Dr. Caffrey (*Computational*)
 - Dr. Fraser (Astro Experiments)
 - A.P. Vohnsen

- Technical staff:*
- Mr. Paul Hanratty

+ Postgraduate demonstrators



Advanced Laboratory Introductory Session 2022/23



Emma Sokell



Luis León Vintro



John Quinn



Tom McCormack



Morgan Fraser



Nuala Caffrey



Brian Vohnsen



Paddy Hayden

Experiments

	Trimester 1	Trimester 2
Single Hons.	4 expts.	4 expts.
PASS/SA (10)	4 expts	4 expts.
TP/Joint/SA(5)	2 expt.* Finish lab by week 8 2/11/22	2 expts.* Finish lab by 15/3/22

- A *Statement of Intent*, signed off by a staff member, must be produced before commencing work on an experiment.

Not required for computational/electronics

Plan for Trimester 1

	SH/PASS/SA(10)	TP/JH/SA (5)
Expt 1	Complete 28 th Sept	Complete 1st Oct*
Expt 2	Complete 19 th Oct*	Complete 2 nd Nov Submission by 13 th Nov
Expt 3	Complete 9 th Nov	NA
Expt 4	Submission by 22 nd Jan	NA

*Last possible Submission 31st Oct

Experiments

- You must keep a laboratory notebook with a detailed record of what you did for each experiment (set-up, procedure, results).
- All data should be available (in either written or electronic form, if appropriate) if requested by staff.
- Please frequently backup all your work!
- If there is no activity on an experiment for two weeks, the experiment will be allocated to someone else.

Reports

- All reports are to be typed (do not forget to append all python notebooks and program code to the end of your reports)
- Electronic version in a single pdf document are to be submitted through Brightspace and a copy e-mailed to Paul Hanratty
- An experiment and report to be completed before starting the next one

Assessment

- Single Hons. & PASS: 8 full written reports.
- TP & Joint: 4 full written reports.
- A staff member will read the report and discuss it with you. (NB. Notebook)
- Reports are to be word-processed, a PDF version (submitted to Brightspace's originality checker & emailed to Paul Hanratty).
- You will not be allocated a new experiment until the report for the previous one has been handed up.
- Interview with staff member who oversees experiment (except introductory exercises).

Assessment

Module	Name	Credits	Laboratory Hours	Grading
PHYC30170	Astronomy and Astrophysics Lab I	20	12 hrs/wk.	80% report, 20% continuous assessment
PHYC30300	Advanced Laboratory I	20	12 hrs/wk.	
PHYC30310	Advanced Laboratory I (Joint)	10	6 hrs/wk.	
PHYC30320	Advanced Laboratory I (TP)	10	6 hrs/wk.	

- Grading Guide & Plagiarism Documents
- <http://libguides.ucd.ie/physics>

Assessment

- Commitment, understanding and practical skills
- Experiments are designed to be extendable – show initiative in pursuing experiments beyond specified instructions
- Assessment based on reports and staff judgement (which in turn is based on interviews during the year)

Introductory Sessions

- *Welcome and Introduction to the Advanced Laboratories*, Prof. Emma Sokell, Tuesday 12 September 2023 at 14:00 (BH: B106)
- *Data Acquisition in Python*, Assoc. Prof. John Quinn, Wednesday 13 September at 14:00 (BH: B106)
- *Data Analysis*, Assoc. Prof. John Quinn, Wednesday 20 September at 14:00 (BH: B106)
- *Report Writing*, Prof. Emma Sokell, Thursday 21 September at 14:00 (BH: B106)
- *From Wednesday September 27th at 2pm Seminars/Debates details tbc*

Other Information

- A **GPA of 2.48** is needed to progress to Stage 4.
- **3rd year will form 30% of the marks for the final degree.**
- **PASS/TP:** if want to take Medical Physics module in 4th year, then you need to take Nuclear Physics module in 3rd year.
- **Google Form sign in and sign out via the QR codes posted in the lab – required for attendance**
- **New email notification list (one way from staff to students). UCD-PHYSICSLABS3@listserv.heanet.ie - contact person: J. Quinn**

What Now?

- Class Rep(s).
- Get started