Advanced Physics Lab

Contact & Schedule University of Toronto Winter 2021

Before completing this form, see www.physics.utoronto.ca/apl.

After applying to enroll in the Advanced Physics Lab on ACORN, this form must be emailed to the Lab Coordinator, David Bailey dbailey@physics.utoronto.ca, for approval.

Contact

Student Name: Name (e.g. first) for Quercus experiment list: Student Number:_____ Course you are registered in:_____ Official UofT Email:_____@mail.utoronto.ca

Alternate Contact (Optional) e.g. gmail /phone:

Schedule

Please put tick-marks (\checkmark) in the cells to indicate the times you would be happy to attend the lab (including the normal Tuesday and Friday morning times), Xs (×) to show the times when you cannot attend the lab, and question marks (?) to indicate times you could attend but would less happy to do so. Be sure to indicate all currently known regular conflicts, even those outside the regular lab periods.

	Mon	Tue	Wed	Thu	Fri
9 – 10					
10 - 11					
11 – 12					
12 - 13					
13 - 14					
14 - 15					
15 - 16					

Do you plan to graduate in June 2021:

YES/NO.

Please indicate here any other information you think we should know, comments, or special requests.:

Instructor Use Only

(Please leave blank, it will be used by us to record your grades)

Experiment	Session	Finish Date	Mark	Signature
Formal				
Oral Exam				

Please fill out the other side of this form as well

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List of experiments available:

Code	Prof	Experiment Name
AFM	JW	Atomic Force Microscope (under development)
BRI	KW	Brillouin scattering
C3D	KW	Conductivity in less than three dimensions
CC	PS	<u>Cloud Chamber</u>
COMP	RO	Measurement of the Compton total cross section
ESR	KW	Electron spin resonance
FAR	KW	Faraday Waves
FE	JW	Ferroelectrics
FTS	KW	Fourier transform spectroscopy
FVF	PS	Fractal Viscous Fingering
GAUS	AV	Gaussian Beams
GE	RO	Gamma ray spectroscopy with a germanium detector
GRAN	KW	Granular Patterns
HALL	JW	Semiconductor resistance, band gap, and Hall effect
HENE	AV	<u>The helium-neon laser</u>
HEP	PS	High energy physics
HTCM	JW	High temperature superconductors (Make)
KNOT	KW	Knots and topological transformations in vibrating chains
LAUE	RO	Laue back reflection of X-Rays
LENS	RO	Lenses
LPP	PS	Linear Pulse Propagation and Dispersion
MOS	PS	Mossbauer effect
MUON	RO	<u>Muon lifetime</u>
NEEL	PS	Phase change in chromium at the Neel temperature
NMR	KW	Nuclear magnetic resonance
OPT	AV	Optical Tweezers
PXR	RO	Powder method of X-ray analysis
QIE	AV	Quantum Interference and Entanglement
RAM	KW	Raman Effect (under development)
RB	AV	Optical pumping of rubidium
SOL	PS	<u>Solitons</u>
SONO	PS	Sonoluminescence
SQM	RO	SQUID magnetometer
STM	JW	Scanning Tunnelling Microscope (under development)
XRF	PS	X-ray fluorescence
SPEC	DB	Special Projects
Notes		

Professors an	e:
DB =	Davi

 $DB = \underline{David Bailey}$ $RO = \underline{Robert Orr}$ $PS = \underline{Pierre Savard}$ $AV = \underline{Amar Vutha}$ $JW = \underline{John Wei}$ KW = Kaley Walker

List in order of

preference at least 25 of the experiments you would like to do. If you are taking this course for the first time, your rankings should include experiments for each professor. List the codes only and list your most preferred experiments first:

1)	2)	3)	4)
5)	6)	7)	8)
9)	10)	11)	12)
13)	14)	15)	16)
17)	18)	19)	20)
21)	22)	23)	24)
25)	26)	27)	28)
29)	30)	31)	32)

Students in PHY 327 and 424 should keep in mind that they must do experiments with 3 different professors, so be sure to list a mix of experiments.

Notes:

During the semester

- The supervising professor for an experiment may change.
- New experiments may be added or deleted.