Advanced Physics Lab Contact & Schedule University of Toronto Winter 2022

**Before completing this form, see** [**www.physics.utoronto.ca/apl**](https://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**](mailto: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 (✓) 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 2022: 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 |  |  |  |  |

Advanced Physics Lab Experiment Preferences University of Toronto Winter 2022

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **List of experiments available:**   |  |  | | --- | --- | | **Code** | **Experiment Name** | | AFM | [Atomic Force Microscope](https://www.physics.utoronto.ca/~phy326/afm) | | BRI | [Brillouin scattering](https://www.physics.utoronto.ca/~phy326/bri) | | C3D | [Conductivity in less than three dimensions](https://www.physics.utoronto.ca/~phy326/c3d) | | CC | [Cloud Chamber](https://www.physics.utoronto.ca/~phy326/cc) | | COMP | [Measurement of the Compton total cross section](https://www.physics.utoronto.ca/~phy326/comp) | | ESR | [Electron spin resonance](https://www.physics.utoronto.ca/~phy326/esr) | | FAR | [Faraday Waves](https://www.physics.utoronto.ca/~phy326/far) | | FE | [Ferroelectrics](https://www.physics.utoronto.ca/~phy326/fe) | | FTS | [Fourier transform spectroscopy](https://www.physics.utoronto.ca/~phy326/fts) | | FVF | [Fractal Viscous Fingering](https://www.physics.utoronto.ca/~phy326/fvf) | | GAUS | [Gaussian Beams](https://www.physics.utoronto.ca/~phy326/gaus) | | GE | [Gamma ray spectroscopy with a germanium detector](https://www.physics.utoronto.ca/~phy326/ge) | | GRAN | [Granular Patterns](https://www.physics.utoronto.ca/~phy326/gran) | | HALL | [Semiconductor resistance, band gap, and Hall effect](https://www.physics.utoronto.ca/~phy326/hall) | | HENE | [The helium-neon laser](https://www.physics.utoronto.ca/~phy326/hene) | | HEP | [High energy physics](https://www.physics.utoronto.ca/~phy326/hep) | | HTCK | [High temperature superconductors (Kit)](https://www.physics.utoronto.ca/~phy326/htc) | | HTCM | [High temperature superconductors (Make)](https://www.physics.utoronto.ca/~phy326/htc) | | KNOT | [Knots and topological transformations in vibrating chains](https://www.physics.utoronto.ca/~phy326/knot) | | LAUE | [Laue back reflection of X-Rays](https://www.physics.utoronto.ca/~phy326/laue) | | LENS | [Lenses](https://www.physics.utoronto.ca/~phy326/lens) | | LPP | [Linear Pulse Propagation and Dispersion](https://www.physics.utoronto.ca/~phy326/lpp) | | MOS | [Mossbauer effect](https://www.physics.utoronto.ca/~phy326/mos) | | MUON | [Muon lifetime](https://www.physics.utoronto.ca/~phy326/muon) | | NEEL | [Phase change in chromium at the Neel temperature](https://www.physics.utoronto.ca/~phy326/neel) | | NMR | [Nuclear magnetic resonance](https://www.physics.utoronto.ca/~phy326/nmr) | | OPT | [Optical Tweezers](https://www.physics.utoronto.ca/~phy326/opt) | | PXR | [Powder method of X-ray analysis](https://www.physics.utoronto.ca/~phy326/pxr) | | QIE | [Quantum Interference and Entanglement](https://www.physics.utoronto.ca/~phy326/qie) | | RAM | [Raman Effect](https://www.physics.utoronto.ca/~phy326/ram) | | RB | [Optical pumping of rubidium](https://www.physics.utoronto.ca/~phy326/rb) | | RES | [Resistivity of Metals](https://www.physics.utoronto.ca/~phy326/res) | | SOL | [Solitons](https://www.physics.utoronto.ca/~phy326/sol) | | SONO | [Sonoluminescence](https://www.physics.utoronto.ca/~phy326/sono) | | SQM | [SQUID magnetometer](https://www.physics.utoronto.ca/~phy326/sqm) | | STM | [Scanning Tunnelling Microscope](https://www.physics.utoronto.ca/apl/stm/) | | XRF | [X-ray fluorescence](https://www.physics.utoronto.ca/~phy326/xrf) | | SPEC | [Special Projects](https://www.physics.utoronto.ca/~phy326/spec) | | **List in order of preference** the experiments you would like to do. 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)  33)   34)   35)   36)  37)   38)   39)   40)  41)   42)   43)   44)  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 wide variety of experiments.  If there are experiments you don’t want to do (or have already done), enter them at the end of the list, i.e. in slots 44, 43, 42, ….  Any experiments you don’t mention will be assumed to rank equally below the experiments you do list, but before any experiments you enter in the end slots. |

**Note:** We use the information provided on this form to initially plan the course and assign experiments. If your schedule, experiment preferences, or other information changes, you may later submit an updated version of this form.