

# Physics Teachers Workshop: CAP/OAPT 2022 McMaster University

Some sessions feature combined presentations (A), (B), or (C).

This document will be updated with the latest information.

Please click on the links for more details about the sessions.

| Time          | Event                                                                                                                                                                                                                                                                                                                                            | Location                                                 |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 8:00 -        | Registration                                                                                                                                                                                                                                                                                                                                     | MDCL                                                     |
| 8:30 – 8:45   | Welcome Address<br>Presentation of the Whippley Award                                                                                                                                                                                                                                                                                            | LR Wilson<br>1057                                        |
| 8:45 – 9:45   | <b>Session 1: Tours</b><br>1) <a href="#">LIVELab</a> (cap: 30)<br>2) <a href="#">Planetarium</a> (cap: 35)                                                                                                                                                                                                                                      | Leaving from<br>LR Wilson                                |
| 9:45 – 10:15  | Break                                                                                                                                                                                                                                                                                                                                            | LR Wilson                                                |
| 10:15 – 11:15 | <b>Session 2</b><br>1) <del>Mathbots</del> - Session canceled<br>2) <a href="#">Destreaming Science!</a><br>3) <a href="#">Measuring the Mass of the Higgs Boson</a><br>4) <del>Online Labs, Circuits</del> - session canceled                                                                                                                   | 1) LRW 1055<br>2) LRW 1056<br>3) LRW 1057                |
| 11:15 – 11:30 | Break                                                                                                                                                                                                                                                                                                                                            | LR Wilson                                                |
| 11:30 - 12:30 | <b>Session 3</b><br>1) <a href="#">Enhancing Physics Experiments with Online Simulations</a><br>2) <a href="#">Beyond Bohr: A Quantum Approach to the Atom</a><br>3) <a href="#">Gr. 11 - Motion - A Hands-On Approach</a>                                                                                                                       | 1) LRW 1055<br>2) LRW 1056<br>3) LRW 1057                |
| 12:30 – 13:30 | Lunch                                                                                                                                                                                                                                                                                                                                            | MDCL                                                     |
| 13:30 – 14:30 | <b>Session 4</b><br>1) <a href="#">Modelling Motion with p5.js</a><br>2) (A) <a href="#">What's New in Physics?</a><br>(B) <a href="#">Modelling the Expanding Universe</a><br>3) (A) <del>Powering Up</del> : canceled<br>(B) <a href="#">Geoengineering and Climate Change</a><br>4) <a href="#">Demonstrations: Inflating the Grasshopper</a> | 1) LRW 3001<br>2) LRW 1055<br>3) LRW 1056<br>4) LRW 1057 |
| 14:30 – 15:00 | Break                                                                                                                                                                                                                                                                                                                                            | LR Wilson                                                |

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| 15:00 - 16:00 | <b>Session 5</b> <ol style="list-style-type: none"> <li>1) <a href="#">Inquiry Based Relativity</a></li> <li>2) <a href="#">(A) Balloons, Boxes and Forces</a><br/><a href="#">(B) Musical Pendulum</a><br/><a href="#">(C) Measuring g Three Ways</a></li> <li>3) <a href="#">(A) Cosmic Rays Live at SNOLAB</a><br/><a href="#">(B) Benefits of running a STEM club</a></li> <li>4) <a href="#">improv-PHYS-ation</a></li> </ol> | 1) LRW 3001<br>2) LRW 1055<br><br>3) LRW 1056<br>4) LRW 1057 |
| 16:15 – 17:15 | <b>Session 6: Tours</b> <ol style="list-style-type: none"> <li>1) <a href="#">Reactor Tour</a> (cap: 30) - long pants/closed shoes required, photo ID required</li> <li>2) <a href="#">Planetarium</a> (cap: 35)</li> <li>3) <del>LIVELab (cap: 30)</del> - canceled</li> </ol>                                                                                                                                                    | Leaving from LR Wilson                                       |
| 17:00 – 19:30 | Social time and BBQ                                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |
| 19:30 - 21:00 | Herzberg Memorial Public Lecture – Donna Strickland                                                                                                                                                                                                                                                                                                                                                                                |                                                              |
| 21:00 -       | Sidewalk Astronomy                                                                                                                                                                                                                                                                                                                                                                                                                 | Location TBA<br>- weather dependent                          |