**Physics Frontiers**

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**Physics for Future Prime Ministers**

**PHYS P22, Physics Frontiers** is a new descriptive course exploring advanced concepts at the frontiers of physics research and applications. Bypassing jargon and mathematical complexities, we will focus on a few concepts relevant to your everyday life and decisions that you will need to make as a citizen and a leader, and link them to big questions probing the extremes of our understanding of the universe.

This course is ideal for arts and humanities students looking to explore the mysteries of the universe and the technologies that surround them.

**Topics include:**

- exploring the quantum domain
- exploiting light for fun and profit (including optical telecommunications)
- what is gravity? (including recent LIGO discoveries)
- the search for dark matter
- the quest for sustainable energy

Dr. James Fraser is an award-winning professor of pure and applied optical and condensed matter physics. He is the recipient of the 2015 *A. Charles Baillie Teaching Award*, the 2016 *Canadian Association of Physicists Medal for Excellence in Teaching Undergraduate Physics*, and a 2017 3M National Teaching Fellowship. Dr. Fraser invites you to sign up for this new and exciting course and join him in exploring the world around you!