Canadian Association of Physicists

Association canadienne des physiciens et physiciennes

Contribution ID: **2613** Type: **Invited Speaker / Conférencier(ère) invité(e)**

On developing an open access first year physics textbook and other free things

Tuesday 4 June 2019 15:15 (30 minutes)

In this talk, I will review my experience working with students at Queen's University to develop an open access textbook aimed at introductory calculus-based physics. In particular, I will discuss how we worked towards designing a text that is better adapted for the flipped classroom approach than current offerings, and how we managed the process of developing the text. While experimental physics is arguably half of the discipline, introductory textbooks tend to ignore this aspect of skill development completely; I will also discuss how we have incorporated a curriculum in experimental physics within the textbook and report on our preliminary experience using this new textbook during the last academic year. Finally, I will briefly report on two additional open source projects that we developed with our students in order to: (1) provide a free in-class response system in support of active learning, and (2) support the development of computer literacy in the labs.

Author: MARTIN, Ryan (Queen's University)

Presenter: MARTIN, Ryan (Queen's University)

Session Classification: T4-10 Thinking Outside the Box (DPE) | Penser hors de la boîte (DEP)

Track Classification: Physics Education / Enseignement de la physique (DPE-DEP)