



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

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This machine has no brain, use your own. Canada's synchrotron as a classroom resource (I)

Wednesday 13 June 2018 13:30 (30 minutes)

The Canadian Light Source is the country's national synchrotron research facility. At its core is the largest particle accelerator in Canada –a 174m circumference storage ring, housed in a building the size of a football stadium. As is usual for facilities of this type, we have hosted thousands of researchers from all over the country and around the world. What is somewhat less usual is that these numbers include more than 1200 high-school students, each one having taken part in an actual hands-on experiment using our facilities. The experiments are student-driven –within the limits of safety and possibility the students make all the decisions. No demonstration experiments allowed –and no try-outs for the teachers in advance. Right from the outset our programs were inclusive –we don't target the high-flyers, but instead challenge teachers to choose the students who would most benefit. We use our facilities –our big machine –to attract students into our programs, but ultimately it is they who perform the science. They must use their brains because, of course, our machine has none.

Presenter: Dr BLYTH, Robert (Canadian Light Source)

Session Classification: W3-1 Creating Authentic Physics Learning Experiences (DPE) | Créer d'authentiques expériences d'apprentissage en physique (DEP)

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