SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) On Track - Undergraduate And Postgraduate Space Education (2)

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CANOROCK AND SPACE PHYSICS EDUCATION IN CANADIAN UNIVERSITIES

Abstract

CaNoRock, the Canada Norway Student Sounding Rocket program, fosters professional and educational development for students by providing them with an intense, one-week, hands-on workshop in Norway. The course gives students the chance to learn about rocket design, aerodynamics, instrumentation, communication, telemetry, and data analysis – all in a time-constrained, team-based environment. Having team members from different countries adds another level of cooperative experience that will be vital to furthering the students' careers in multilateral space programs around the world. The program is designed to expand awareness of space physics amongst students in Canada and Norway, as both countries are leaders in research vital to northern nations, such as space plasma physics, atmospheric physics, and space weather.

In conjunction with the CaNoRock program, and with the help of the Canadian Space Agency, work is being done in Canadian universities to expand this week-long course into a larger and more ambitious program with a space physics curriculum offered in Canada. With the development of space technology courses in Canada that are built around significant experimental design components, CaNoRock will be able to offer students more opportunities to build expertise through the cooperation and participation of universities, government agencies such as the Canadian Space Agency, and Canadian aerospace industry companies such as SED Systems. Involving previous CaNoRock students in the development of the expanded Canadian space curriculum will be integral to the success of this endeavour. In addition to this, opportunities for graduate research projects are being actively cultivated in order to attract the brightest students into space science and technology, building capacity and competence in Canada in these fields which will prove vital as the vast resources of the north are increasingly relied upon.