



Contribution ID: 1588 Type: **CLOSED - Oral (Student, In Competition) / Orale (Étudiant(e), inscrit à la compétition)**

What makes students choose a physics major, or not?

Wednesday 31 May 2017 14:30 (15 minutes)

In order to create a scientifically literate society, and to keep up with the rapid pace of technological change around the world, more students must be encouraged to pursue degrees in physics and related fields (President's Council of Advisors, 2012). This study invited students taking introductory physics at a university in Atlantic Canada to participate in an anonymous, mainly short answer survey regarding their physics experiences both before and during their first year at university, and to discuss what influenced their choice of major. The course professor and lab technician were also interviewed to get their perspectives.

The results of our grounded theory analysis showed that interest in the “fascinating” subject matter of physics, or in their chosen field, was the primary factor affecting students' choice of major. Interest in the field was followed by their perceptions of the teaching in the introductory physics courses, their impressions of what careers would be available to them after university, and their feelings of competence to succeed in a physics degree. The new physics education research-based laboratory curriculum that had been implemented during the academic year in question was perceived as more interesting and stimulating than traditional laboratories, especially for female students. This talk will summarize the results of the study and illustrate how they may be useful for physics professors, lab instructors, support staff, and administrators.

Authors: STILES-CLARKE, Laura (St. Francis Xavier University); Dr MACLEOD, Katarin (St. Francis Xavier University)

Presenter: STILES-CLARKE, Laura (St. Francis Xavier University)

Session Classification: W3-1 Teaching Physics to a Wider Audience (DPE/CEWIP) | Enseigner la physique à un auditoire plus vaste (DEP/CEFEP)

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