

SP - (16471) - SCIENCE OUTREACH TO PROMOTE PHYSICS: COMPARISON OF A FACE-TO-FACE AND AN ONLINE SCHOOL VISIT PROGRAMME

Gráinne Walshe (Ireland)¹; Sadhbh Ryan (Ireland)¹; Maria Quinn (Ireland)¹; Agata Lynch (Ireland)¹; Merrilyn Goos (Ireland)¹; Stephen Comiskey (Ireland)¹; Kelly Fitzgerald (Ireland)²; Zohreh Eshghimanesh (Ireland)¹; Elora Mcfall (Ireland)¹; Robert Lynch (Ireland)¹; Nancy Serrano (Ireland)¹; Vincent Casey (Ireland)¹; Yvonne Kavanagh (Ireland)³

1 - University of Limerick; 2 - Tait House Community Organisation; 3 - Institute of Technology Carlow

Short Abstract

This presentation reports on the digital solutions that were developed to solve the problem of having to move a face-to-face school outreach programme to online-only engagement with participants. The main activity in the project has been a school visit programme to encourage students, especially female students, to study physics at upper second-level in school, with increasing focus also on other forms of diversity. Prior to the move online, undergraduate physics students visited schools to deliver a workshop to lower-second level students in Ireland. The workshop consists of demonstrations and information about physics, and emphasises a sense of belonging, endorses effort and hard work over brilliance, and combats the stereotypes of who does physics. Other project activities include a student competition for projects researching famous women physicists/important physics discoveries/local physics, and a showcase event to inform teachers of the issues with regards to gender in physics. The face-to-face school visit programme is popular with teachers, and has shown very good outcomes for student intentions and changes in attitudes with respect to physics, but as a result of COVID-19, it was no longer possible to continue with it from March 2020. A new online version of the school workshop has been developed and piloted in Autumn 2020, and will be rolled out to interested schools from February 2021. This presentation will outline how project activities were adapted for online delivery, while incorporating the same design principles that underpinned the face-to-face activities. It will also compare the impact on school students who participate in the online iteration to the impact on those who previously participated in the face-to-face iteration. This presentation should offer some practical guidance for those seeking to conduct virtual public engagement, as well as providing an indication of the implications of such a move for reaching project aims.