Title: Supporting female belonging in physics: staff student partnership in the SOPHia school visit programme.

Speaker. Gráinne Walshe

Abstract. There is a three to one ratio of male to female students taking physics at Leaving Certificate level. This has a knock-on effect on the low numbers of females taking physics at third-level, and ultimately in senior roles in academia and industry. Therefore the Department of Physics and the Science Learning Centre at the University of Limerick, with the support of the Institute of Physics, launched the SOPHia Project in 2018. The project aims to encourage more female school student to take up physics. The involvement of undergraduate students as co-creators with staff in the design and implementation of project activities, in particular the school visit workshop, is central to SOPHia. This presentation will outline the collaborative design process involving staff, postgraduates and undergraduates, and discuss the impact on school students, teachers and also on the undergraduate facilitators. It will highlight some of the research literature on supporting women in undergraduate physics, indicating how some of this informed the SOPHia workshop design. It will also consider some of the other ways in which physics identity can be supported for students of all genders.

Bio.

Dr Gráinne Walshe is the Science Learning Centre Director at the University of Limerick. She provides learning support to undergraduate students of physics, and she teaches in the Department of Physics. Her research areas focus on curriculum organisation for integration of STEM subjects at second-level, improving uptake of physics by female students, and on improving learning support for students of science subjects at third-level. She is project lead for the SOPHia project, an SFI-funded project to promote physics as a school subject, especially to female students. She is a member of the Institute of Physics Higher Education Group committee. She is also a member of the NCCA development group for the new Senior Cycle Physics curriculum.