Academics Without Borders (AWB) is pleased to welcome University of Alberta faculty members, Dr. Peter Berg and Dr. Jeremy Sylvestre, as volunteers on the project to create a Computational-Physics Platform at the University of Eswatini (UNESWA).

In 2019, the Departments of Physics and Mathematics at UNESWA launched two post-graduate programmes: an MSc in Computational Physics and MSc in Mathematics with mathematical modelling. With the development of these programs the need to modernize the teaching and learning methodologies of the computational physics related courses has been recognized.

The project plans the creation of a free, online computational-physics resource that will consist of a public website that contains learning modules and examples in the field of computational physics and scientific computing. The platform will host downloadable and executable files that any member of the public will be able to access free of charge. Over time, this will allow for the creation of a reference set of learning modules that any instructor can utilize. The aims of the project are; to build capacity within the area of computational physics and mathematical modelling; to create world-class, open, online educational resource through open-source web applications and; to train students and staff on the creation of interactive online content to enhance teaching and learning at UNESWA.

Given the current limitations on international travel, the first phase of the project, scheduled to begin in July 2021, will be conducted through remote collaboration with onsite working visits being planned for 2022.

Academics Without Borders is a non-profit organization whose mission is to support capacity development in higher education in low- and middle-income countries so that these countries can educate the experts and professionals that are necessary for their development. It does this by sending expert volunteers from Canada and other countries to support local initiatives. AWB projects focus on a number of areas including teaching and learning methodology, building research capacity, curriculum and content develop for various academic disciplines, student services, and academic support services.

AWB's Network is a consortium of Canadian universities and colleges that support AWB's mission. The University of Alberta has been a member of the AWB Network since inception in 2016. The project was introduced to AWB through the October 2020 Call for Project Proposals to Network institutions.