

Abstract Submitted
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Remote prototyping of Physics experiments in Higher Education.¹ JULIAN FELIX VALDEZ, Universidad de Guanajuato, MAGDALENA WALESKA ALDANA SEGURA, Universidad de San Carlos de Guatemala — During the Pandemic situation in 2020, Professors and students were forced to quickly adapt to new methodologies and ways of communication. Quality of Education was some of the issues raised as if it was possible to keep students interested, engaged and at the same, to get high quality contents that will provide them the necessary tools for their professional development. Using virtual communication, it was possible to design, build and simulate 14 prototypes to be characterized from the International Elementary Particle Laboratory, remotely during the first semester of 2020. These prototypes will be used to further analyze cosmic ray radiation, whilst at the same time, students are provided with the unique opportunity to acquire new skills, update their software management and learn new computational tools that will allow them to acquire, analyze and publish data obtained with one of kind, original prototypes. The final intention is to get students to publish at least 14 articles, during 2020 with the data obtained from these innovations, and to be able to test these prototypes at the Test Beam Facilities at Fermi National Accelerator Laboratory during 2022.

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