4th World Conference on Physics Education 2024, Kraków, Poland



Contribution ID: 101

Type: Workshop

Hands-on with Relativity Lab: a simulation environment for special relativity in secondary education

Thursday 29 August 2024 15:30 (1h 30m)

The theory of special relativity is a notoriously difficult learning objective, especially in secondary education. Relativistic phenomena are counter-intuitive and very remote from everyday experience. Moreover, it is impossible to observe relativistic effects in practical experiments. We designed an online simulation environment, called Relativity Lab, in which students can construct and observe virtual relativistic experiments. A team of researchers and teachers collaboratively designed, performed and evaluated a three-lesson series centered around the use of Relativity Lab. In this workshop, participants are invited to experience Relativity Lab hands-on, with the aim of embedding Relativity Lab in their own teaching practice.

How would you like to present your contribution?

Live in Kraków (time slot to be allotted based on the programme)

Target education level

Secondary

Category

Formal Education

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Session Classification: Workshop

Track Classification: Multimedia, AR, VR and AI in Physics Education