

GIREP-EPEC conference 2023 Physics learning promoting culture and addressing societal issues

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Type: Poster

Study of the free damped oscillations of an elastic rubber band by using a smartphone

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In the last years, the use of smartphones as laboratory tools for school physics experiments has received attention for the possibility of carrying out a wide variety of didactic experiences with low-cost experimental equipment. In this contribution, we describe an experimental activity that can be carried out by using smartphones to investigate the oscillations of a damped oscillator made of an elastic rubber loop and a mass. This system allows one to obtain information on the viscoelastic properties of the rubber material.

How would you like to present your contribution?

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

Target education level (primary)

University education

Target education level (secondary, optional)

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