



GIREP-EPEC
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Physics learning promoting culture
and addressing societal issues

Contribution ID: 4

Type: **Oral presentation**

Do It Yourself: a Simple Model of the Kibble Balance

Tuesday 4 July 2023 11:40 (20 minutes)

The Kibble balance is an instrument used for determining mass in the new definition of the SI system. The fact that this is a rather complex device may complicate students' understanding of how the unit of mass is now defined. A simple model (showing just the “electromagnetic part” of the Kibble balance, not the relation of a kilogram to Planck's constant) can help understand the principle of this device. The paper will present the construction of such a simple model, show how to use it in both velocity and force modes, and discuss the results of measurements.

How would you like to present your contribution?

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

Target education level (primary)

Upper-secondary education

Target education level (secondary, optional)

In-service teacher education

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Session Classification: Lab work and experiments

Track Classification: Lab work and experiments in physics education