



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