



**GIREP-EPEC**  
**3–7 July 2023**  
Košice, Slovakia

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

Contribution ID: 93

Type: **Oral presentation**

## STEM recipes for digital natives

*Tuesday 4 July 2023 10:40 (20 minutes)*

These days, teachers face an increasing challenge in motivating students, especially in physics. Classical experiments are often difficult to carry out with outdated experimental equipment and cannot compete with the stimulating environment. These circumstances have led to a significant change in the attitude of students towards physics. Increasingly popular, low-cost and widely available microcontrollers can be used to solve these problems in physics class. In this presentation, we aim to introduce some of our home-made experimental devices controlled by Arduino, which contribute to the action-oriented education of students, provide a deeper understanding of physical phenomena and improve their attitudes.

### 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)

Lower-secondary education

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**Session Classification:** Lab work and experiments

**Track Classification:** Lab work and experiments in physics education