



Contribution ID: 88

Type: **Oral presentation**

## **Application of Item response curves analysis and Rasch model on physics knowledge tests of Croatian students**

*Monday 3 July 2023 14:40 (20 minutes)*

Objective evaluation of learning outcomes is a major part of teaching. Choosing an appropriate test analysis method is crucial. Item response curve analysis, as part of item response theory, and the Rasch method effectively analyse test scores and indicate the possibilities of improving the selection of questions or the offered answers, in terms of identifying students' preconceptions. In the contribution, we will present the results of both methods on selected physics knowledge tests including multiple-choice questions, in order to indicate the method of analysing knowledge tests for the purpose of evaluating physics conceptual knowledge and understanding.

### **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

**Author:** ŠTIBI, Ivana

**Co-authors:** PAVLIN, Jerneja; ČEPIČ, Mojca (University of Ljubljana, Faculty of Education)

**Presenter:** ŠTIBI, Ivana

**Session Classification:** Innovative curricula

**Track Classification:** Innovative curricula for physics teaching, learning and assessment