



Contribution ID: 17

Type: **Oral presentation**

## Multimedia-supported electricity teaching via the application “Puma : Spannungslabor”

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

Learning about Electricity suffers from the fundamental concepts being difficult to understand for students. The multimedia application “PUMA : Spannungslabor” was developed to support students by visualizing didactic analogies for electricity. The application uses Augmented Reality-technology to place a digital representation atop a real-world circuit. It is connected to the real-world circuit by camera and via Bluetooth, which enables the measurement and presentation of real-life data via the app. An additional mode was implemented, enabling the use of the application as a simulation. This contribution presents the application and gives examples on how it can support learning about electricity.

### How would you like to present your contribution?

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

### Target education level (primary)

Lower-secondary education

### Target education level (secondary, optional)

**Author:** STOLZENBERGER, Christoph

**Co-authors:** FRANK, Florian; Prof. TREFZGER, Thomas

**Presenter:** STOLZENBERGER, Christoph

**Session Classification:** Innovative strategies at school

**Track Classification:** Innovative strategies and pathways to improve physics education at school