

**GIREP-ICPE-EPEC-MPTL 2019 CONFERENCE**

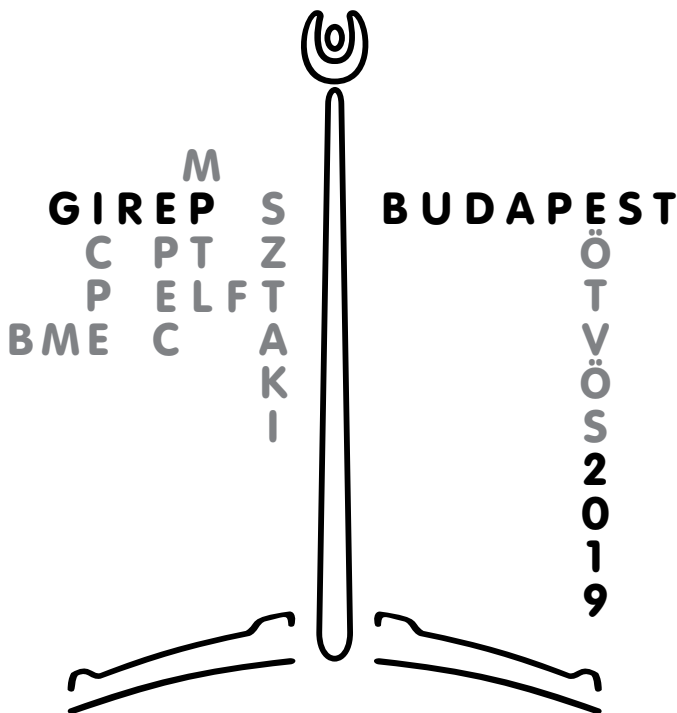
**Celebration of Eötvös Year 2019**

**Teaching-learning contemporary physics, from research to practice**

**1st July – 5 th July 2019**

**Budapest University of Technology and Economics  
in Budapest, Hungary**

**CONFERENCE PROGRAMME  
BOOK OF ABSTRACTS**



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**Programme and Book of Abstracts**

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**and Economics in Budapest, Hungary**

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# Science Centre as a Part of the Education System in the Czech Republic

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**Abstract.** The aim of this poster presentation is to present the results of a survey regarding the impact of extracurricular education at Palacký University science centre on pupils' school performance in comparison with curricular education survey. This survey is realised by a pre-test and a post-test. Furthermore, the conference attendees will be introduced to teaching materials used during the science centre lectures - pupils' worksheets, methodology for teachers and optical components manufacturing manual. These components will be used by the pupils during the experiments. After their evaluation, the pupils will describe the observed physical phenomena.

## 1 Key words

Didactics of physics, science centre, extracurricular education, school performance.

## 2 Introduction

Although extracurricular education in science centres is gradually being integrated into the Czech education system, visiting science centres is still based on the initiative of schools, or, rather teachers' initiative. This could be caused by the yet to be understood impact of extracurricular education in science centres on pupils' school performance.

## 3 Aim

This research focuses on the evaluation of physics as a school subject. Secondary aim of this work is to develop a tool for assessing the science centre-based extracurricular education and subsequently to evaluate the impact of science centre-based extracurricular education on pupils' school performance. The evaluation is conducted at Palacký University science centre (orig. Pevnost poznání) as a part of the physics courses. The courses are created along the lines of research-oriented education based on pupils conducting the experiments and their subsequent evaluation of the observed phenomena.

## 4 Presentation outputs

During this poster presentation there will be introduced the learning materials created as a part of teaching programs related to optical components. Each teaching program includes pupils' work sheets, methodology for teachers and optical components manufacturing manual. These components will be manufactured during school lessons and the pupils will attempt to describe the physical phenomena. The components will be included in this poster presentation. Integrated into the presentation will be the comparison of the curricular and

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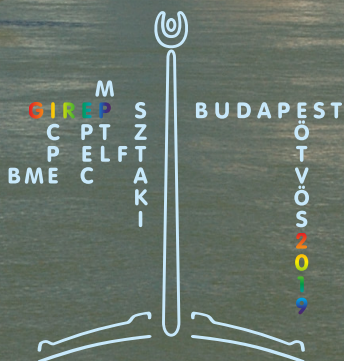
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## Programme and Book of Abstracts

Budapest, 1-5 July, 2019



### Celebration of Eötvös Year 2019



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