

## Abstract

The main purpose of this diploma thesis is to obtain information on how Matfyz can improve its cooperation with high school students and their physics teachers to increase students' interest in physics. To obtain these information a questionnaire was sent to physics teachers, who had been mentioned by Matfyz students as teachers who had had a positive effect on them. The questionnaire itself consists of four parts – events for students, events for physics teachers, Matfyz activities, and teaching. The data was processed using both quantitative and qualitative methods, whereas larger part of research was build on quantitative methods. The collected data showed that according to respondents the most important task is to focus on non-Prague students. Thus, organizers should organize events in various places in the Czech Republic or use modern technologies and organize events on-line (that also applies to events for physics teachers). High school students might also meet with scientists and university physics students, visit laboratories except for visitors' days (e. g. during excursions, internships) or have an opportunity to find out how physics in companies is used. Respondents expressed support for writing a new physics textbook on Matfyz, one containing more difficult parts for talented students.