# How to intensify the motivation of high schoolers for physics in a week?



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Feel free to ask us anything!

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This contribution introduces two examples of good practice of promotion of physics among high school students. Both are week-long intense activities organised by universities for upper secondary (ISCED 3) students. Both events show contemporary physics to the participants, and they try to increase their motivation for further study of physics.

## Week of Applied Physics

in Czech: Týden s aplikovanou fyzikou (TSAF)

organised by FYKOS (The Internet Physics Competition) Faculty of Mathematics and Physics, Charles University

### TSAF 2017 - Prague and its vicinity

- Ondřejov Astronomical Institute of the Czech Academy of Sciences - Perk's telescope and lecture "Exoplanets and their research".
- The Day with Experimental Physics lecture "Physics of low temperatures", excursions to laboratories of the Faculty in the morning, visit Prague Asterix Laser System. and water plasmatron at Czech Academy of Sciences, or to school reactor Vrabec
- iQLANDIA Science Center Liberec workshop about radioactivity; planetarium; Aquapark Babylon
- Open Day of the Faculty; a walk through evening Prague centre
- ÚJV Řež of Czech Academy of Sciences nuclear engineering, excursions to nuclear reactors
- and more

# TSAF 2015 - CERN, ESRF... (D, CH, F)

- The Day with Experimental Physics; introductory lecture about CERN
- visit BMW factory in Dingolfing and the airport in Munich
- a day-long visit to Deutsches Museum
- European Synchrotron Radiation Facility in Grenoble
- excursion in CERN, S'Cool Lab, exhibition Microcosm
- cheese factory Gruyéres, chocolate factory Cailler



#### Feedback from participants (2017)

• "Honestly, I wasn't in the mood for TSAF on Sunday, but now I am sorry it has already finished.... Many thanks to everybody who took part in the programme and enjoyed it (hopefully) with us."

OF MATHEMATICS

- "I am happy that I took part (in TSAF). I would change nothing."
- "It was great except for little something:)"



### Science Week

in Czech: Týden vědy na Jaderce (TV@J)

at Faculty of Nuclear Sciences and Physical Engineering of Czech Technical University in Prague





Introduction



Intro-game Fort "Břehyard"



**Mini-projects** 2 days of experiments experimentation with scientists

Lectures

**Excursions** participants select from > 10 poss.







data processing preparing of a 4-page article

preparing of a presentation

**Gala Dinner and Casino** 



**Presentations** 



### Feedback from participants (2018)

Would you recommend (or not) this event?

- "I would definitely recommend this event. It is a beautiful week full of science, discoveries, research and also of getting to know new people and fun."
- "Yes, and I have already done that. Besides the exceptional experience, it was a splendid opportunity to get to know people with similar interests, and it was a chance to visit TOKAMAK."
- "No. I will not tell anyone about this event. I don't want them to have the chance to know more than me."





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