## Katedra matematiky a didaktiky matematiky FPTU v Liberci

srdečně zve zájemce z řad studentů (nejen) učitelství matematiky, učitele z praxe i další zájemce na přednášku pořádanou v rámci projektu iTEM - Improve Teacher Education in Mathematics

## MATHEMATIKUS – A WEBSITE TO DEVELOP STUDENT'S SPATIAL ABILITY

## Prof. Dr. Klaus-Peter EICHLER Pondělí 4. 10. 2021 od 14:20 hodin, Zasedací místnost DFP

(4. patro budovy G areálu TUL, Univerzitní nám. 1410/1, Liberec)

**Anotace:** The importance of spatial ability is undisputed. It results in daily life from the fact that it is

- an intelligence factor, crucial for professional success, and contributes to the mastering of a lot of everyday requirements.

It is also significant that one of the reasons of difficulties in arithmetic is the poorly developed ability to imagine spatial objects and processes: In 80% of students with arithmetic difficulties, the reason is mainly poor spatial ability. We know very well that appropriate exercises can train spatial ability. Many of the tasks for spatial ability training require a large amount of material and preparation time. In addition, students often spend more time on activities such as cutting, folding, or building when working on the tasks than on training the imagination of objects or processes themselves. In light of the widespread use of powerful computers and the fast Internet, it is possible to perform spatial animations on web pages in real-time. Touchscreens not only simplify input but also enable very realistic use of objects displayed on the screen.

The learning platform Mathematikus, which has been significantly expanded within the iTEM project and is also available in Czech, will be presented in the lecture. Students can use this platform to develop their spatial skills in a targeted manner.



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Přednáška bude proslovena v anglickém jazyce.







