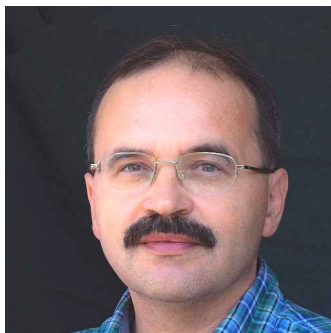


**Vysoké učení technické v Brně**  
**Fakulta stavební**  
**Ústav matematiky a deskriptivní geometrie**

Vás zve na přednášku

**Shadowing, Hyers-Ulam stability and hyperbolicity  
for nonautonomous linear delay differential equations**

**Přednášku přednese Prof. Mihály Pituk**



Department of Mathematics  
University of Pannonia  
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<https://math.uni-pannon.hu/~pitukm/index-en.html>

**ve středu 28. srpna 2024 ve 13:00**

v zasedací místnosti ústavu (ÚMDG, 2. patro Z205), ul. Žižkova 17.

**Abstract.** It is known that hyperbolic nonautonomous linear delay differential equations in finite dimensional spaces are Hyers–Ulam stable and hence shadowable. The converse result is available only in the special case of autonomous and periodic linear delay differential equations with a simple spectrum. In this talk, we show the converse and hence the equivalence of all three notions in the title for a general class of nonautonomous linear delay differential equations with uniformly bounded coefficients. The importance of the uniform boundedness assumption will be shown by an example.

This is a joint work with Professors Lucas Backes (Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil) and Davor Dragičević (University of Rijeka, Rijeka, Croatia).

Ing. Jan Holešovský, Ph.D.  
vedoucí ústavu