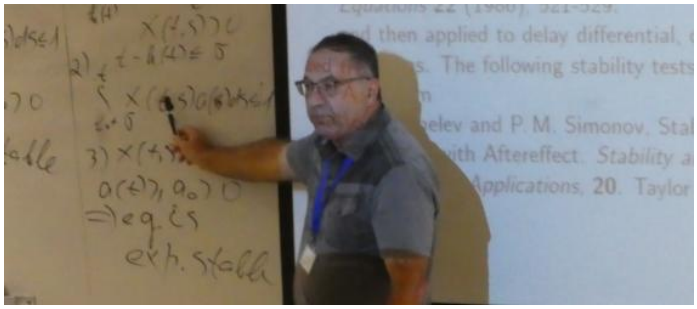
FAKULTA ELEKTROTECHNIKY A KOMUNIKAČNÍCH TECHNOLOGIÍ
ústav matematiky

Srdečně zveme všechny zájemce na přednášku

On exponential stability of linear and non-linear delay differential equations: a review and new results,

kterou přednese

Prof. Leonid Berezansky



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ve čtvrtek 4. září 2025 v 10:30

Místo konání: Ústav matematiky FEKT, T6.16, 6. patro, Technická 8

Abstract: The talk presents an extensive review and some new results on uniform exponential stability of a non-autonomous scalar linear functional differential equation with several delays. In the first part of the talk, we give a review of several known asymptotic and exponential stability conditions for linear equations. We start with the better investigated case of continuous parameters. Then we present tests for measurable parameters. In the second part, we formulate and apply the global linearised stability theorem to obtain global exponential stability conditions for nonlinear equations. For linear FDE the proofs are based on a priori estimation of solutions and their derivatives, and apply the Bohl-Perron theorem. The talk is based on a recently submitted joint paper with Elena Braverman.

Přednáška je určena všem zájemcům o problematiku a je podpořena projektem RP182314001.

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