

Srdečně zveme všechny zájemce na přednášku

The difference operator of neutral functional differential equations and qualitative properties of the 1D systems with distributed parameters,

kterou přednese

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Abstract. To the boundary value problems for hyperbolic partial differential equations with one space variable certain systems of neutral functional differential equations can be associated following a methodology elaborated by A. D. Myshkis (1960) and K. L. Cooke (1968, 1970). Due to the one-to-one correspondence between the solutions of the two mathematical objects, all properties obtained for one of them is projected back on the other, for instance stability and forced oscillations. However the aforementioned properties require asymptotic stability of the difference operator associated to the neutral functional differential equations. This is not always true for certain applications originating from mechanical, electrical or hydraulic engineering.

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