Asymptotic equivalence of triangular differential equations in Hilbert spaces

Chau D.D., Tuan V.

Hanoi University of Science, Hanoi, Viet Nam; Hanoi Pedagogic University, Hanoi, Viet Nam

Abstract: In this article, we study conditions for the asymptotic equivalence of differential equations in Hilbert spaces. We also discuss the relationship between the properties of solutions of differential equations of triangular form and those of truncated differential equations. ?? 2005 Springer Science+Business Media, Inc.

Year: 2005 Source title: Ukrainian Mathematical Journal Volume: 57 Issue: 3 Page: 394-405 Link: Scorpus Link Correspondence Address: Chau, D.D.; Hanoi University of Science, Hanoi, Viet Nam ISSN: 415995 DOI: 10.1007/s11253-005-0198-3 Language of Original Document: English Abbreviated Source Title: Ukrainian Mathematical Journal Document Type: Article Source: Scopus Authors with affiliations: 1. Chau, D.D., Hanoi University of Science, Hanoi, Viet Nam 2. Tuan, V., Hanoi Pedagogic University, Hanoi, Viet Nam References: 1. Barbashin, E.A., (1967) Introduction to Stability Theory [in Russian], , Nauka, Moscow 2. Demidivitch, B.P., (1967) Lectures on Mathematical Theory of Stability [in Russian], Nauka, Moscow 3. Levinson, N., The asymptotic behavior of systems of linear differential equations (1946) Amer. J. Math., 63, pp. 1-6 4. Hoan, N.T., Asymptotic equivalence of systems of differential equations (1975) Izv. Akad. Nauk Az. SSR., (2), pp. 35-40 5. Dang Dinh Chau, Studying the instability of infinite systems of differential equations by general characteristic number (1983) Sci. Bull. Nat. Univ. Belarus, Ser. 1. Phys., Math., Mech., (1), pp. 48-51 6. Tuan, V., Dang Dinh Chau, On the Lyapunov stability of a class of differential equations in Hilbert spaces (1996) Sci. Bull. Univ. Math. Ser., , Vietnam

Download Full Text: 0766.pdf