

On the exponential stability of dynamic equations on time scales

Du N.H., Tien L.H.

Department of Mathematics, Mechanics and Informatics, Vietnam National University, Hanoi, 334 Nguyen Trai, Hanoi, Viet Nam

Abstract: In this paper, we deal with some theorems on the exponential stability of trivial solution of time-varying non-regressive dynamic equation on time scales with bounded graininess. In particular, well-known Perron's theorem is generalized on time scales. Under rather restrictive condition, that is, integral boundedness of coefficient operators, we obtain a characterization of the uniformly exponential stability. © 2006 Elsevier Inc. All rights reserved.

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Correspondence Address: Du, N.H.; Department of Mathematics, Mechanics and Informatics, Vietnam National University, Hanoi, 334 Nguyen Trai, Hanoi, Viet Nam; email: dunh@vnu.edu.vn

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Authors with affiliations:

- Du, N.H., Department of Mathematics, Mechanics and Informatics, Vietnam National University, Hanoi, 334 Nguyen Trai, Hanoi, Viet Nam
- Tien, L.H., Department of Mathematics, Mechanics and Informatics, Vietnam National University, Hanoi, 334 Nguyen Trai, Hanoi, Viet Nam

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