Electronic Transactions on Numerical Analysis. Volume 27, pp. 26-33, 2007. Copyright © 2007, Kent State University. ISSN 1068-9613.



OSCILLATION OF FACTORED DYNAMIC EQUATIONS*

J. DEVRIES † and A. HULME †

Abstract. Results developed for the Euler–Cauchy dynamic equation are extended to a more general class of factored dynamic equations. The oscillation properties are studied in the case of isolated time scales, where a necessary and sufficient criterion for oscillation is developed.

Key words. time scales, factored dynamic equations

AMS subject classifications. 39A10

^{*}Received December 19, 2003. Accepted for publication May 5, 2004. Recommended by A. Ruffing. This work was supported by NSF Grant 0072505, under the guidance of Dr. Lynn Erbe and Dr. Allan Peterson.

[†]Department of Mathematics, University of Nebraska-Lincoln 203 Avery Hall, Lincoln NE 68588-0130 (s-jdevrie3@math.unl.edu, ahulme@wisc.edu).

²⁶