

OSCILLATION CRITERIA FOR A CERTAIN CLASS OF SECOND ORDER EMDEN–FOWLER DYNAMIC EQUATIONS*

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Abstract. By means of Riccati transformation techniques we establish some oscillation criteria for the second order Emden–Fowler dynamic equation on a time scale. Such equations contain the classical Emden–Fowler equation as well as their discrete counterparts. The classical oscillation results of Atkinson (in the superlinear case) and Belohorec (in the sublinear case) are extended in this paper to Emden–Fowler dynamic equations on any time scale.

Key words. oscillation, dynamic equation, time scale, Riccati transformation technique

AMS subject classifications. 34K11, 39A10, 39A99, 34C10, 39A11

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