Grace, S. R.; **Lalli, B. S.**

Oscillation theorems for damped differential equations of even order with deviating arguments. (English) Zbl 0542.34057

SIAM J. Math. Anal. 15, 308-316 (1984).

In this paper the oscillatory behaviour of the even order differential equations with deviating arguments of the form

$$x^{(n)} + p(t)x^{(n-1)} + q(t)f(x[g_1(t)], x[g_2(t)], ..., x[g_m(t)]) = 0$$

is discussed. The oscillation criteria are given which improve similar criteria established by *C. C. Yeh* [Proc. Am. Math. Soc. 84, 397-402 (1982; Zbl 0498.34023)] for $\ddot{x} + p(t)\dot{x} + q(t)f(x) = 0$. The conditions and the results are rather too complicated for reproducing here.

MSC:

34K99 Functional-differential equations (including equations with delayed, advanced or state-dependent argument)

Keywords:

differential equations with deviating arguments; oscillation criteria

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