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OSCILLATION CRITERIA FOR CERTAIN EVEN ORDER DIFFERENTIAL EQUATIONS WITH DISTRIBUTED DEVIATING ARGUMENTS

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Abstract. By using averaging function and the approach developed by Philos and Kong, Kamenev-type and interval oscillation criteria are established for the even order differential equation with distributed deviating arguments,

$$(r(t)|x^{(n-1)}(t)|^{p-1}x^{(n-1)}(t))' + \int_{\alpha}^{\beta} F[t,\xi,x(g(t,\xi))]d\sigma(\xi) = 0.$$

The obtained results are extensions of existing ones for second order linear differential equations.

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