

## Özkan Öcalan, Nurten Kılıç

### *Oscillation conditions for first-order nonlinear advanced differential equations*

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**Abstract:** Our purpose is to analyze a first order nonlinear differential equation with advanced arguments. Then, some sufficient conditions for the oscillatory solutions of this equation are presented. Our results essentially improve two conditions in the paper “Oscillation tests for nonlinear differential equations with several nonmonotone advanced arguments” by N. Kılıç, Ö. Öcalan and U. M. Özkan. Also we give an example to illustrate our results.

**Keywords:** nonlinear advanced equation; nonmonotone argument; oscillatory solution

**AMS Subject Classification:** 34C10, 34K06, 34K11

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