08. Ordinary Differential Equations and Dynamical Systems
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Asymptotic properties of nonlinear ordinary differential equation

Asymptotic properties of solutions have been considered for some nonlinear differential equations. The paper deals with investigation of bounded solutions, of prolongation of solutions, oscillatory solutions and another asymptotic properties. The examples have been stated which illustrate the given methods and have got physical interest. The examples have been stated which illustrate the given methods and have got physical interest. The paper is divided in two parts and each of them investigating some of asymptotic properties for certain differential equation. For general information is referred a short reference The part one deals with asymptotic behavior of positive solutions. They are also related to oscillation theory. In part two we consider some equation and we obtain necessary conditions and sufficient conditions for existence of certain monotonic, oscillatory solutions, and estimates eigenvalue for operators of higher order.

References:

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