

Ordinary differential equations

Hartman, Philip, 1915- , author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20451343&lokasi=lokal>

Abstrak

This SIAM reissue of the 1982 second edition covers invariant manifolds, perturbations, and dichotomies, making the text relevant to current studies of geometrical theory of differential equations and dynamical systems. In particular, Ordinary Differential Equations includes the proof of the Hartman-Grobman theorem on the equivalence of a nonlinear to a linear flow in the neighborhood of a hyperbolic stationary point, as well as theorems on smooth equivalences, the smoothness of invariant manifolds, and the reduction of problems on ODEs to those on "maps"

Ordinary Differential Equations is based on the author's lecture notes from courses on ODEs taught to advanced undergraduate and graduate students in mathematics, physics, and engineering. The book, which remains as useful today as when it was first published, includes an excellent selection of exercises varying in difficulty from routine examples to more challenging problems.