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Title

Introduction to Ordinary Differential Equations with Mathematica: An Inte

Authors

[Alfred Gray](#)

[Michael J. Mezzino Jr.](#)

[Mark Pinsky](#)

Book information

Publisher: TELOS/Springer-Verlag

Copyright year: 1997

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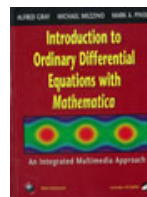
Medium: Hardcover

Includes: CD-ROM

Pages: 890

Out of print?: N

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Contents

Basic Concepts | Using Mathematica to Study Differential Equations | First Order Differential Equations | Uniqueness of Solutions of First Order Differential Equations | Applications of First Order Equations | Second Order Linear Differential Equations | Second Order Linear Differential Equations with Applications of Linear Second Order Equations | Numerical Solutions of Differential Equations | The Laplace Transform | Systems of Linear Differential Equations | Nonlinear Systems | Applications of Systems | Power Series Solutions of Second Order Equations | Appendices: Review of Linear Algebra and Matrix Theory; Systems of Units

Description

Book/CD-ROM package that provides a traditional treatment of elementary ordinary differential equations and the computer-assisted methods available with Mathematica. Classical solution methods are presented and developed from classical physics, population biology, electrical circuits, and elementary mechanics. Knowledge of multi-variable calculus and linear algebra is recommended.

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