

1. Record Nr.	UNINA9910816359903321
Autore	Freiling G
Titolo	Lectures on the differential equations of mathematical physics [[electronic resource]] : a first course // G. Freiling and V. Yurko
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2008
ISBN	1-60741-907-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (314 p.)
Altri autori (Persone)	YurkoV. A
Disciplina	530.15/535
Soggetti	Differential equations Mathematical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [297]-299) and index.
Nota di contenuto	<p>""Contents""; ""Preface""; ""Introduction""; ""1.1. Some Examples of Equations of Mathematical Physics""; ""1.2. Classification of Second-Order Partial Differential Equations""; ""1.3. Formulation of Problems of Mathematical Physics""; ""Hyperbolic Partial Differential Equations""; ""2.1. The Cauchy Problem for the Equation of the Vibrating String""; ""2.2. The Mixed Problem for the Equation of the Vibrating String""; ""2.3. The Goursat Problem""; ""2.4. The Riemann Method""; ""2.5. The Cauchy Problem for the Wave Equation""; ""2.6. An Inverse Problem for the WaveEquation""</p> <p>""2.7.Inverse Spectral Problems""""2.8. Inverse Scattering on the Line""; ""2.9. The Cauchy Problem for the Korteweg - De Vries Equation""; ""Parabolic Partial Differential Equations""; ""3.1. The Mixed Problem for the Heat Equation""; ""3.2. The Cauchy Problem for the Heat Equation""; ""Elliptic Partial Differential Equations""; ""4.1. Harmonic Functions and Their Properties""; ""4.2. Dirichlet and Neumann Problems""; ""4.3. The Greena€?s Function Method""; ""4.4. The Method of Upper and Lower Functions""; ""4.5. The Dirichlet Problem for the Poisson Equation""</p> <p>""4.6. The Method of Integral Equations""""4.7. The Variational Method""; ""The Cauchy-Kowalevsky Theorem""; ""Exercises""; ""6.1. Classification of Second-Order Partial Differential Equations""; ""6.2. Hyperbolic Partial Differential Equations""; ""6.3. Parabolic Partial Differential Equations""; ""6.4. Elliptic Partial Differential Equations""; ""6.5. Answers and Hints""; ""References""; ""Index""</p>

