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Nonlinear partial differential equations for scientists and engineers. 2nd ed. (English)

Zbl 1069.35001

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This is a revised and expanded version of the 1997 first edition [(1997; Zbl 0892.35001)]. There have been included new examples, exercises, comments and even sections, for example about Sturm-Liouville systems, higher dimensional wave and diffusion equations, fractional PDEs, the Euler-Lagrange and Hamiltonian variational principles, new classes of dispersive evolution equations and about asymptotic expansions and the method of multiple scales. The bibliography has been updated.

MSC:

- 35-01 Introductory exposition (textbooks, tutorial papers, etc.) pertaining to partial differential equations
- 35-02 Research exposition (monographs, survey articles) pertaining to partial differential equations
- 35Q55 NLS equations (nonlinear Schrödinger equations)
- 35Q51 Soliton equations
- 35L65 Hyperbolic conservation laws

Cited in **5** Reviews
Cited in **30** Documents