

Dubrovin, B. A.**Theta functions and non-linear equations.** (English) Zbl 0549.58038

Russ. Math. Surv. 36, No. 2, 11-92 (1981).

Translation from Usp. Mat. Nauk 36, No.2(218), 11-80 (Russian) (1981; [Zbl 0478.58038](#)).**MSC:**

- [58J99](#) Partial differential equations on manifolds; differential operators
- [35Q99](#) Partial differential equations of mathematical physics and other areas of application
- [53C22](#) Geodesics in global differential geometry
- [14H40](#) Jacobians, Prym varieties
- [14H52](#) Elliptic curves
- [30F99](#) Riemann surfaces
- [35B99](#) Qualitative properties of solutions to partial differential equations
- [35C99](#) Representations of solutions to partial differential equations

Cited in **3** Reviews
Cited in **166** Documents**Keywords:**

theta-functions; Riemann motions; nonlinear differential equations; Schrödinger equation; theta-functions of Riemann surfaces; two-zone potentials; Kovalevskaya problem; geodesics on an ellipsoid; non-abelian Toda lattice

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