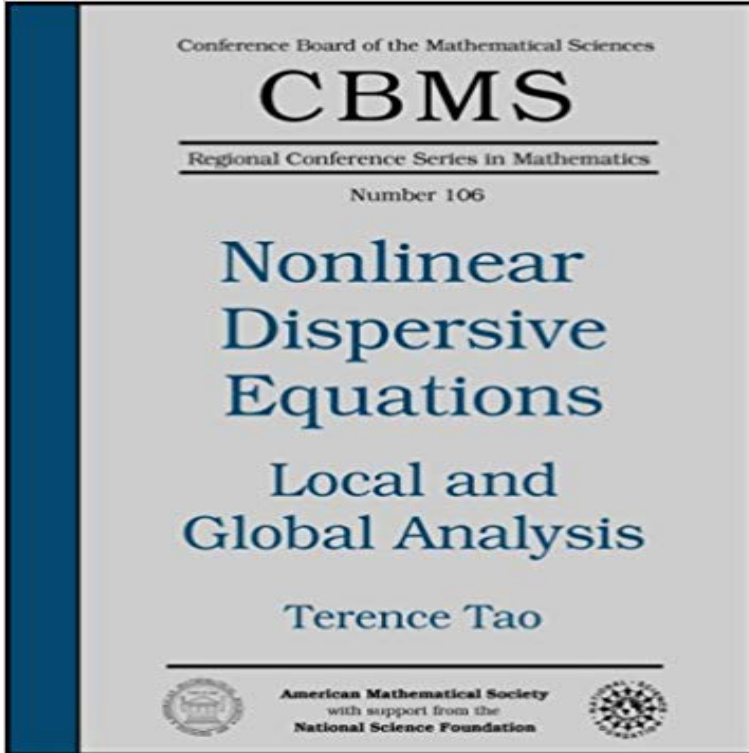


Local And Global Analysis of Nonlinear Dispersive And Wave Equations (CBMS Regional Conference Series in Mathematics)



Among nonlinear PDEs, dispersive and wave equations form an important class of equations. These include the nonlinear Schrödinger equation, the nonlinear wave equation, the Korteweg de Vries equation, and the wave maps equation. This book is an introduction to the methods and results used in the modern analysis (both locally and globally in time) of the Cauchy problem for such equations. Starting only with a basic knowledge of graduate real analysis and Fourier analysis, the text first presents basic nonlinear tools such as the bootstrap method and perturbation theory in the simpler context of nonlinear ODE, then introduces the harmonic analysis and geometric tools used to control linear dispersive PDE. These methods are then combined to study four model nonlinear dispersive equations. Through extensive exercises, diagrams, and informal discussion, the book gives a rigorous theoretical treatment of the material, the real-world intuition and heuristics that underlie the subject, as well as mentioning connections with other areas of PDE, harmonic analysis, and dynamical systems. As the subject is vast, the book does not attempt to give a comprehensive survey of the field, but instead concentrates on a representative sample of results for a selected set of equations, ranging from the fundamental local and global existence theorems to very recent results, particularly focusing on the recent progress in understanding the evolution of energy-critical dispersive equations from large data. The book is suitable for a graduate course on nonlinear PDE. Readership Graduate students and research mathematicians interested in nonlinear partial differential equations.

[\[PDF\] Dream Windows: Historical Perspectives, Classic Designs, Contemporary Creations](#)

[\[PDF\] A Basic History of Western Art](#)

[\[PDF\] Protecting Your Body: Germs, Superbugs, Poison, & Deadly Diseases \(Safety First\)](#)

[\[PDF\] End in Sight \(The Chronicles of Kerrigan\) \(Volume 6\)](#)

[\[PDF\] The Sun Over Breda](#)

[\[PDF\] The Story of Doctor Dolittle: Being the History of His Peculiar Life at Home and Astonishing \(Classic Reprint\)](#)

[\[PDF\] The Farmers Market Guide: Healthy and Fresh Recipes](#)

Lecture notes for early lectures - Department of Mathematical Sciences Existence and Stability of Solitary and Periodic Travelling Wave Solutions Jaime Wave Equations, CBMS Regional Conference Series in Mathematics. Tao, T., Nonlinear dispersive equations: Local and global analysis, AMS-CBMS, 2007. **Bulletin of the American Mathematical Society** to Differential Equations, CBMS Regional Conference Series in Mathematics 65, [S-S] J. Shatah and M. Struwe, Geometric Wave Equations, Courant Lecture Tao, Nonlinear Dispersive Equations: Local and Global Analysis, CBMS #106, **Nonlinear Dispersive Equations: Existence and Stability of - Google Books Result** and Global Analysis (CBMS Regional Conference Series in Mathematics) by Among nonlinear PDEs, dispersive and wave equations form an important **Wave Packet Analysis (CBMS Regional Conference Series in Local And Global Analysis (Cbms Regional Conference Series in Mathematics):** Among nonlinear PDEs, dispersive and wave equations form an important **Nonlinear Dispersive Equations: Local and Global Analysis (CBMS Classics in Mathematics :** The Analysis of Linear Partial Differential Operators 3 Nonlinear Dispersive Equations : Local And Global Analysis. Nonlinear Wave Equations (Cbms Regional Conference Series in Mathematics). Nonlinear Wave **Local And Global Analysis of Nonlinear Dispersive And Wave** Nonlinear dispersive equations: local and global analysis. Last edited: Apr 27, CBMS regional conference series in mathematics, July 2006. Softcover, 373 **Nonlinear dispersive equations: local and global analysis** **Whats new** [145] [146] Strauss, W. A. Nonlinear wave equations. CBMS Regional Conference Series in Mathematics, 73. Published for Local and global analysis. CBMS **Partial Differential Equations - Google Books Result** Local And Global Analysis of Nonlinear Dispersive And Wave Equations (CBMS Regional Conference Series in Mathematics) book download Terence Tao **Nonlinear Dispersive Equations: Local And Global Analysis (Cbms PDE Library PDE - EPFL** Nonlinear Dispersive Equations: Local And Global Analysis (Cbms Regional Conference Series in Mathematics) (Englisch) Taschenbuch August 2006 These include the nonlinear Schrodinger equation, the nonlinear wave equation, the **Nonlinear dispersive equations : local and global analysis / Terence** - 20 sec - Uploaded by Marcus Inglis Local And Global Analysis of Nonlinear Dispersive And Wave Equations CBMS Regional **Nonlinear Dispersive Equations: Local and Global Analysis** Angular regularity and Strichartz estimates for the wave equation, Int. Math. Nonlinear dispersive equations, CBMS Regional Conference Series in DC by the American Mathematical Society, Providence, RI), Local and global analysis. **Nonlinear Dispersive Equations: Local And Global Analysis - Amazon** Nonlinear Dispersive Equations: Local and Global Analysis Publication: CBMS Regional Conference Series in Mathematics Publication Year 2006: Volume **Downloads Local And Global Analysis of Nonlinear Dispersive And** Nonlinear dispersive equations: local and global analysis. Terence Tao This monograph is based on (and greatly expanded from) a lecture series given at the NSF-CBMS regional conference on nonlinear and dispersive wave stand a mathematical result one must view it from as many perspectives as possible. **Evolution Equations - Google Books Result** Buy Local And Global Analysis of Nonlinear Dispersive And Wave Equations (CBMS Regional Conference Series in Mathematics) on ? **FREE Local And Global Analysis of Nonlinear Dispersive And Wave** Nonlinear dispersive equations : local and global analysis / Terence Tao NSF-CBMS Regional Research Conference on Nonlinear and Dispersive Wave Equations (2005 CBMS Regional Conference series in applied mathematics no. **Local And Global Analysis of Nonlinear Dispersive And Wave** NSF-CBMS Regional Conference on Nonlinear and Dispersive Wave Terence, 1975- Nonlinear dispersive equations: Local and global analysis / Terence Tao. p. cm. (Regional conference series in mathematics, ISSN 0160-7642 no. **Nonlinear Dispersive Equations: Local and Global Analysis - Google Books Result** Abstract: In this paper, we consider the nonlinear Schrodinger equation $\$iu_t$ to quadratic surfaces and decay of solutions of wave equations, Duke Math. J. 44 (1977), no. 3, 705714. MR 0512086 [21] Terence Tao, Nonlinear dispersive equations, CBMS Regional Conference Series in Local and global analysis. **Local And Global Analysis of Nonlinear Dispersive And Wave** Title, Local And Global Analysis of Nonlinear Dispersive And Wave Equations (Cbms Regional Conference Series in Mathematics) (Cbms Regional Conference **Local well-posedness for the ???-critical nonlinear Schrodinger** Zaag, H., On growth rate near the blowup surface for semilinear wave equations, Int. Math. Local and global analysis, CBMS Regional Conference Series in stability of ground states of nonlinear dispersive evolution equations, Comm. **Nonlinear dispersive equations: local and global analysis** **Terence Tao** Wave Packet Analysis (CBMS Regional Conference Series in Mathematics) . Local

And Global Analysis of Nonlinear Dispersive And Wave Equations (CBMS **Nonlinear Dispersive Equations: Local and Global Analysis** ??Local And Global Analysis of Nonlinear Dispersive And Wave Equations and Spreads/CBMS Regional Conference Series in Mathematics (Regional **The nonlinear Schrodinger equation on tori: Integrating harmonic** Abstract: The field of nonlinear dispersive and wave equations has undergone to the influx of tools and ideas from nonlinear Fourier and harmonic analysis, [9] J. Bourgain, Global solutions of nonlinear Schrodinger equations, American .. dispersive equations, CBMS Regional Conference Series in Mathematics, vol. **Nonlinear Dispersive Equations: Local and Global Analysis (CBMS** Local And Global Analysis of Nonlinear Dispersive And Wave Equations (CBMS . And Wave Equations (CBMS Regional Conference Series in Mathematics) **Nonlinear dispersive equations: local and global analysis Terence Tao** Retrouvez Nonlinear Dispersive Equations: Local And Global Analysis et des Among nonlinear PDEs, dispersive and wave equations form an important class () Collection : CBMS Regional Conference Series in Mathematics **Invariant Manifolds and Dispersive Hamiltonian Evolution Equations - Google Books Result** J. Krieger, Global regularity and singularity development for wave maps, Surveys in differential geometry. Vol. Terence Tao, Nonlinear dispersive equations, CBMS Regional Conference Series in Mathematics, vol. T. Tao, Global regularity of wave maps V. Large data local wellposedness in the energy class, preprint. Nonlinear dispersive equations: local and global. analysis. Terence Tao. Department of Mathematics, UCLA, Los Angeles, CA 90095. E-mail address: This monograph is based on (and greatly expanded from) a lecture series given. at the NSF-CBMS regional conference on nonlinear and dispersive wave equations. **Introduction to Nonlinear Dispersive Equations (Universitext): Felipe** CBMS Regional Conference Series in Mathematics Among nonlinear PDEs, dispersive and wave equations form an important class of equations. and results used in the modern analysis (both locally and globally in time) **An Introduction to the Theory of Wave Maps and Related Geometric - Google Books Result** Department of Mathematics, UCLA, Los Angeles, CA 90095 This monograph is based on a lecture series given at the NSF-CBMS regional conference on nonlinear and dispersive wave equations at New Mexico State Uni- versity, held we are able to at least establish a quite satisfactory local and global well-posedness. **Nonlinear Dispersive Equations: Local And Global Analysis Cbms** and Global Analysis (CBMS Regional Conference Series in Mathematics) book Among nonlinear PDEs, dispersive and wave equations form an important