

The book was found

Hodge Theory (MN-49) (Mathematical Notes)



Synopsis

This book provides a comprehensive and up-to-date introduction to Hodge theory—one of the central and most vibrant areas of contemporary mathematics—from leading specialists on the subject. The topics range from the basic topology of algebraic varieties to the study of variations of mixed Hodge structure and the Hodge theory of maps. Of particular interest is the study of algebraic cycles, including the Hodge and Bloch-Beilinson Conjectures. Based on lectures delivered at the 2010 Summer School on Hodge Theory at the ICTP in Trieste, Italy, the book is intended for a broad group of students and researchers. The exposition is as accessible as possible and doesn't require a deep background. At the same time, the book presents some topics at the forefront of current research. The book is divided between introductory and advanced lectures. The introductory lectures address Kähler manifolds, variations of Hodge structure, mixed Hodge structures, the Hodge theory of maps, period domains and period mappings, algebraic cycles (up to and including the Bloch-Beilinson conjecture) and Chow groups, sheaf cohomology, and a new treatment of Grothendieck's algebraic de Rham theorem. The advanced lectures address a Hodge-theoretic perspective on Shimura varieties, the spread philosophy in the study of algebraic cycles, absolute Hodge classes (including a new, self-contained proof of Deligne's theorem on absolute Hodge cycles), and variation of mixed Hodge structures. The contributors include Patrick Brosnan, James Carlson, Eduardo Cattani, François Charles, Mark Andrea de Cataldo, Fouad El Zein, Mark L. Green, Phillip A. Griffiths, Matt Kerr, Lê Dũng Tráng, Luca Migliorini, Jacob P. Murre, Christian Schnell, and Loring W. Tu.

Book Information

Series: Mathematical Notes

Paperback: 608 pages

Publisher: Princeton University Press; 1 edition (July 21, 2014)

Language: English

ISBN-10: 0691161348

ISBN-13: 978-0691161341

Product Dimensions: 6 x 1.6 x 9.2 inches

Shipping Weight: 1.9 pounds

Average Customer Review: 3.0 out of 5 stars 1 customer review

Best Sellers Rank: #420,372 in Books (See Top 100 in Books) #24 in Books > Science & Math > Mathematics > Research #51 in Books > Science & Math > Mathematics > Pure Mathematics >

Customer Reviews

"Charles and Schnell's chapter beautifully surveys the theory of absolute Hodge classes, giving in particular a complete proof of Deligne's theorem on absolute Hodge classes on abelian varieties. . . . A welcome addition to the literature and should be useful to both graduate students and researchers working in Hodge theory."--Dan Petersen, MathSciNet

Eduardo Cattani is professor of mathematics at the University of Massachusetts, Amherst. Fouad El Zein is a researcher at the Institut de Mathématiques de Jussieu, Université de Paris VII. Phillip A. Griffiths is former director and professor emeritus of mathematics at the Institute for Advanced Study in Princeton. Lê Dũng Tráng is professor emeritus of mathematics at the Aix-Marseille Université.

A COMPLETE INTRODUCTION AND BEYOND TO THIS FASCINATING THEORY THAT MUST BE ON YOUR DESK...

[Download to continue reading...](#)

Hodge Theory (MN-49) (Mathematical Notes) Beyond Katrina: A Meditation on the Mississippi Gulf Coast (Sarh Mills Hodge Fund Publications) The Mathematical Theory of Non-uniform Gases: An Account of the Kinetic Theory of Viscosity, Thermal Conduction and Diffusion in Gases (Cambridge Mathematical Library) Lecture Notes on Mathematical Olympiad Courses: For Junior Section Vol 1 (Mathematical Olympiad Series) Simple Mathematical Models of Gene Regulatory Dynamics (Lecture Notes on Mathematical Modelling in the Life Sciences) Topics in Algebraic and Analytic Geometry. (MN-13), Volume 13: Notes From a Course of Phillip Griffiths (Mathematical Notes) Recursion Theory, Godel's Theorems, Set Theory, Model Theory (Mathematical Logic: A Course With Exercises, Part II) Mathematical Interest Theory (Mathematical Association of America Textbooks) Mathematical Optimization and Economic Theory (Prentice-Hall series in mathematical economics) An Introduction to the Mathematical Theory of Waves (Student Mathematical Library, V. 3) Mathematical Problems from Combustion Theory (Applied Mathematical Sciences) (v. 83) Mathematical Theory of Nonequilibrium Steady States: On the Frontier of Probability and Dynamical Systems (Lecture Notes in Mathematics) Read Music Notes Fast Level 1 - My Unique Method - Read Music Notes like Names of People: Music Theory The Mathematical Theory of Symmetry in

Solids: Representation Theory for Point Groups and Space Groups (Oxford Classic Texts in the Physical Sciences) Applied Functional Analysis: Applications to Mathematical Physics (Applied Mathematical Sciences) (v. 108) Fundamental Algebraic Geometry (Mathematical Surveys and Monographs) (Mathematical Surveys and Monographs Series (Sep.Title P) Elementary Algebraic Geometry (Student Mathematical Library, Vol. 20) (Student Mathematical Library, V. 20) A Course in Mathematical Modeling (Mathematical Association of America Textbooks) Handbook of Mathematical Functions: with Formulas, Graphs, and Mathematical Tables (Dover Books on Mathematics) Mathematical Apocrypha: Stories and Anecdotes of Mathematicians and the Mathematical (Spectrum)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)