

|                         |   |
|-------------------------|---|
| 1. Record Nr.           | UNINA9911011657603321   |
| Autore                  | Barlet Daniel   |
| Titolo                  | Complex Analytic Cycles II : The Cycle Space // by Daniel Barlet, Jón Magnússon   |
| Pubbl/distr/stampa      | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025   |
| ISBN                    | 9783031848452   |
| Edizione                | [1st ed. 2025.]   |
| Descrizione fisica      | 1 online resource (1346 pages)  |
| Collana                 | Grundlehren der mathematischen Wissenschaften, A Series of Comprehensive Studies in Mathematics, , 2196-9701 ; ; 363  |
| Altri autori (Persone)  | MagnússonJón  |
| Disciplina              | 515.94  |
| Soggetti                | Functions of complex variables<br>Geometry, Projective<br>Several Complex Variables and Analytic Spaces<br>Projective Geometry  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di contenuto       | 5 Construction of the Cycle Space -- 6 Relative fundamental classes -- 7 Intersection theory -- 8 Holomorphic currents and Intersection Theory in a nearly smooth complex spaces -- 9 Chow varieties and Cycle spaces -- 10 Douady > Cycles -- 11 Convexity of Cycles space -- 12 Kählerianity of Cycle Spaces.   |
| Sommario/riassunto      | This book is the second volume of a work on complex analytic cycles and the results, stated without proof in the first volume, are proved here. It begins with the construction of the reduced complex space formed by all compact cycles of a given complex space. Following this construction the main subjects of the book are: • Fundamental class of a cycle and relative fundamental class of an analytic family of cycles • Intersection theory with parameters on complex manifolds and more generally on nearly smooth complex spaces • Holomorphic currents on reduced complex spaces • Chow varieties and cycle spaces of quasi-projective complex spaces • Natural morphism from the Douady space to the cycle space • Holomorphic convexity in cycle spaces and integration of $\bar{\partial}$ -cohomology classes on cycles • Strong Kählerianity of cycle spaces of Kähler manifolds • Numerous important applications of cycle space theory Preliminaries needed in the book in addition to the material of the first volume, for instance sheaf |

cohomology with support, are explained in detail, making this two-volume work quite self-contained. The French version of the present book was published in 2020 by the French Mathematical Society in the series Cours Spécialisés and during the translation process the authors have improved in many ways the original version.

---