

1. Record Nr.	UNINA9910300153403321
Autore	Angella Daniele
Titolo	Cohomological Aspects in Complex Non-Kähler Geometry // by Daniele Angella
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-02441-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XXV, 262 p. 7 illus.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2095
Disciplina	514.223
Soggetti	Differential geometry Functions of complex variables Differential Geometry Several Complex Variables and Analytic Spaces
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Preliminaries on (almost-) complex manifolds -- Cohomology of complex manifolds -- Cohomology of nilmanifolds -- Cohomology of almost-complex manifolds -- References.
Sommario/riassunto	In these notes, we provide a summary of recent results on the cohomological properties of compact complex manifolds not endowed with a Kähler structure. On the one hand, the large number of developed analytic techniques makes it possible to prove strong cohomological properties for compact Kähler manifolds. On the other, in order to further investigate any of these properties, it is natural to look for manifolds that do not have any Kähler structure. We focus in particular on studying Bott-Chern and Aeppli cohomologies of compact complex manifolds. Several results concerning the computations of Dolbeault and Bott-Chern cohomologies on nilmanifolds are summarized, allowing readers to study explicit examples. Manifolds endowed with almost-complex structures, or with other special structures (such as, for example, symplectic, generalized-complex, etc.), are also considered.