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Titolo	Kähler Immersions of Kähler Manifolds into Complex Space Forms // by Andrea Loi, Michela Zedda
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Descrizione fisica	1 online resource (105 pages)
Collana	Lecture Notes of the Unione Matematica Italiana, , 1862-9113 ; ; 23
Disciplina	515.73
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
Nota di contenuto	- The Diastasis Function -- Calabi's Criterion -- Homogeneous Kähler manifolds -- Kähler-Einstein Manifolds -- Hartogs Type Domains -- Relatives -- Further Examples and Open Problems.
Sommario/riassunto	The aim of this book is to describe Calabi's original work on Kähler immersions of Kähler manifolds into complex space forms, to provide a detailed account of what is known today on the subject and to point out some open problems. Calabi's pioneering work, making use of the powerful tool of the diastasis function, allowed him to obtain necessary and sufficient conditions for a neighbourhood of a point to be locally Kähler immersed into a finite or infinite-dimensional complex space form. This led to a classification of (finite-dimensional) complex space forms admitting a Kähler immersion into another, and to decades of further research on the subject. Each chapter begins with a brief summary of the topics to be discussed and ends with a list of exercises designed to test the reader's understanding. Apart from the section on Kähler immersions of homogeneous bounded domains into the infinite complex projective space, which could be skipped without compromising the understanding of the rest of the book, the prerequisites to read this book are a basic knowledge of complex and Kähler geometry.

