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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Lie groupoids and Lie algebroids -- Connections on Lie groupoids and Lie algebroids -- Groupoids of bre morphisms -- Four case studies -- Symmetries -- Cartan geometries -- A comparison with alternative approaches -- Innitesimal Cartan geometries on TM -- Projective geometry: the full version -- Conformal geometry: the full version -- Developments and geodesics -- Cartan theory of second-order dierential equations. .
Sommario/riassunto	In this book we first review the ideas of Lie groupoid and Lie algebroid, and the associated concepts of connection. We next consider Lie groupoids of fibre morphisms of a fibre bundle, and the connections on such groupoids together with their symmetries. We also see how the infinitesimal approach, using Lie algebroids rather than Lie groupoids, and in particular using Lie algebroids of vector fields along the projection of the fibre bundle, may be of benefit. We then introduce Cartan geometries, together with a number of tools we shall use to study them. We take, as particular examples, the four classical types of geometry: affine, projective, Riemannian and conformal geometry. We also see how our approach can start to fit into a more general theory. Finally, we specialize to the geometries (affine and projective) associated with path spaces and geodesics, and consider their symmetries and other properties.