1. Record Nr. UNINA9910154748403321 Autore Griffiths Phillip A. Titolo Differential Systems and Isometric Embeddings.(AM-114), Volume 114 // Gary R. Jensen, Phillip A. Griffiths Pubbl/distr/stampa Princeton, NJ: .: Princeton University Press, . [2016] ©1987 **ISBN** 1-4008-8210-9 1 online resource (241 pages) : portrait Descrizione fisica Collana Annals of Mathematics Studies:: 336 Disciplina 515.3/53 Exterior differential systems Soggetti Differential equations, Partial **Embeddings** (Mathematics) Riemannian manifolds Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Frontmatter -- Contents -- Preface -- Commonly used notation -- 1. Introduction -- 2. Structure equations of Xn EN -- 3. Pfaffian differential systems -- 4. Quasi-linear Pfaffian differential system -- 5. The isometric embedding system -- 6. The characteristic variety -- 7. Isometric embeddings of space forms -- 8. Embedding Cauchy-Riemann structures -- References -- Index Sommario/riassunto The theory of exterior differential systems provides a framework for systematically addressing the typically non-linear, and frequently overdetermined, partial differential equations that arise in differential geometry. Adaptation of the techniques of microlocalization to differential systems have led to recent activity on the foundations of the theory; in particular, the fundamental role of the characteristic variety in geometric problems is now clearly established. In this book the general theory is explained in a relatively quick and concrete manner, and then this general theory is applied to the recent developments in the classical problem of isometric embeddings of

Riemannian manifolds.