1. Record Nr. UNINA9910154754703321 Autore **Eells James** Titolo Harmonic Maps and Minimal Immersions with Symmetries (AM-130), Volume 130: Methods of Ordinary Differential Equations Applied to Elliptic Variational Problems. (AM-130) / / Andrea Ratto, James Eells Princeton, NJ:,: Princeton University Press,, [2016] Pubbl/distr/stampa ©1993 ISBN 1-4008-8250-8 Descrizione fisica 1 online resource (235 pages): illustrations Collana Annals of Mathematics Studies;; 312 Disciplina 514/.7 Soggetti Harmonic maps Immersions (Mathematics) Differential equations, Elliptic - Numerical solutions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Frontmatter -- INTRODUCTION -- TABLE OF CONTENTS -- PART 1. Nota di contenuto BASIC VARIATIONAL AND GEOMETRICAL PROPERTIES -- PART 2. G-INVARIANT MINIMAL AND CONSTANT MEAN CURVATURE IMMERSIONS -- PART 3. HARMONIC MAPS BETWEEN SPHERES -- APPENDIX 1. SECOND VARIATIONS -- APPENDIX 2. RIEMANNIAN IMMERSIONS Sm. Sn -- APPENDIX 3. MINIMAL GRAPHS AND PENDENT DROPS --APPENDIX 4. FURTHER ASPECTS OF PENDULUM TYPE EQUATIONS --**REFERENCES -- INDEX** Sommario/riassunto The aim of this book is to study harmonic maps, minimal and parallel mean curvature immersions in the presence of symmetry. In several instances, the latter permits reduction of the original elliptic variational problem to the qualitative study of certain ordinary differential equations: the authors' primary objective is to provide representative examples to illustrate these reduction methods and their associated analysis with geometric and topological applications. The material covered by the book displays a solid interplay involving geometry, analysis and topology: in particular, it includes a basic presentation of 1-cohomogeneous equivariant differential geometry and of the theory

of harmonic maps between spheres.