| 1. | Record Nr. | UNINA9910299981203321 |
|---|---|---|
| | Autore | Asaoka Masayuki |
| | Titolo | Foliations: Dynamics, Geometry and Topology / / by Masayuki Asaoka, Aziz El Kacimi Alaoui, Steven Hurder, Ken Richardson ; edited by Jesús Álvarez López, Marcel Nicolau |
| | Pubbl/distr/stampa | Basel : , : Springer Basel : , : Imprint : Birkhäuser, , 2014 |
| | ISBN | 3-0348-0871-2 |
| | Edizione | [1st ed. 2014.] |
| | Descrizione fisica | 1 online resource (IX, 198 p. 20 illus., 10 illus. in color.) |
| | Collana | Advanced Courses in Mathematics - CRM Barcelona, , 2297-0304 |
| | Disciplina | 514.72 |
| | Soggetti | Manifolds (Mathematics) |
| | | Complex manifolds |
| | | Dynamics |
| | | Ergodic theory |
| | | Global analysis (Mathematics) |
| | | Manifolds and Cell Complexes (incl. Diff.Topology) |
| | | Dynamical Systems and Ergodic Theory |
| | | Global Analysis and Analysis on Manifolds |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |
| | Livello bibliografico | Monografia |
| | Note generali | Bibliographic Level Mode of Issuance: Monograph |
| | Nota di contenuto | Fundamentals of Foliation Theory -- Foliation Dynamics -- Deformation of Locally Free Actions and Leafwise Cohomology -- Transversal Dirac Operators on Distributions, Foliations, and G-Manifolds. |
| | Sommario/riassunto | This book is an introduction to several active research topics in Foliation Theory and its connections with other areas. It contains expository lectures showing the diversity of ideas and methods arising and used in the study of foliations. The lectures by A. El Kacimi Alaoui offer an introduction to Foliation Theory, with emphasis on examples and transverse structures. S. Hurder's lectures apply ideas from smooth dynamical systems to develop useful concepts in the study of foliations, like limit sets and cycles for leaves, leafwise geodesic flow, transverse exponents, stable manifolds, Pesin Theory, and hyperbolic, parabolic, and elliptic types of foliations, all of them illustrated with examples. The lectures by M. Asaoka are devoted to the computation of the |

leafwise cohomology of orbit foliations given by locally free actions of certain Lie groups, and its application to the description of the deformation of those actions. In the lectures by K. Richardson, he studies the geometric and analytic properties of transverse Dirac operators for Riemannian foliations and compact Lie group actions, and explains a recently proved index formula. Besides students and researchers of Foliation Theory, this book will appeal to mathematicians interested in the applications to foliations of subjects like topology of manifolds, dynamics, cohomology or global analysis.