1. Record Nr. UNIORUON00081451

Autore	FATTOVICH, Rodolfo
Titolo	The Gash group : a complex society in the lowlands to the east of the Nile / Rodolfo Fattovich
Pubbl/distr/stampa	P. 191-200 ; 25 cm
Edizione	[Lille : UniversitÚ Charles-De-Gaulle]
Descrizione fisica	Estratto da: Cahiers de Recherches de l'Institut de Papyrologie et d'Egyptologie de Lille, n. 17
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910257433803321

Autore	Perlick Volker
Titolo	Ray Optics, Fermat’s Principle, and Applications to General Relativity / / by Volker Perlick
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2000
ISBN	3-540-46662-2
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (X, 222 p.)
Collana	Lecture Notes in Physics Monographs ; ; 61
Disciplina	523.0153
Soggetti	Electrodynamics Mathematics Astrophysics Gravitation Mathematical physics Magnetism Classical Electrodynamics Applications of Mathematics Classical and Quantum Gravity Mathematical Methods in Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa

Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	From Maxwell’s equations to ray optics -- to Part I -- Light propagation in linear dielectric and permeable media -- Light propagation in other kinds of media -- A mathematical framework for ray optics -- to Part II -- Ray-optical structures on arbitrary manifolds -- Ray-optical structures on Lorentzian manifolds -- Variational principles for rays -- Applications.
Sommario/riassunto	This book is about the mathematical theory of light propagation in media on general-relativistic spacetimes. The first part discusses the transition from Maxwell's equations to ray optics. The second part establishes a general mathematical framework for treating ray optics as a theory in its own right, making extensive use of the Hamiltonian formalism. This part also includes a detailed discussion of variational principles (i.e., various versions of Fermat's principle) for light rays in general-relativistic media. Some applications, e.g. to gravitational lensing, are worked out. The reader is assumed to have some basic knowledge of general relativity and some familiarity with differential geometry. Some of the results are published here for the first time, e.g. a general-relativistic version of Fermat's principle for light rays in a medium that has to satisfy some regularity condition only.