1.	Record Nr.	UNINA9910151936503321
	Autore	Buyalo Sergei
	Titolo	Elements of Asymptotic Geometry [[electronic resource] /] / Sergei Buyalo, Viktor Schroeder
	Pubbl/distr/stampa	Zuerich, Switzerland, : European Mathematical Society Publishing House, 2007
	ISBN	3-03719-536-3
	Descrizione fisica	1 online resource (212 pages)
	Collana	EMS Monographs in Mathematics (EMM) ; , 2523-5192
	Classificazione	51-xx53-xx
	Soggetti	Differential & Riemannian geometry Geometry Differential geometry
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Sommario/riassunto	Asymptotic geometry is the study of metric spaces from a large scale point of view, where the local geometry does not come into play. An important class of model spaces are the hyperbolic spaces (in the sense of Gromov), for which the asymptotic geometry is nicely encoded in the boundary at infinity. In the first part of this book, in analogy with the concepts of classical hyperbolic geometry, the authors provide a systematic account of the basic theory of Gromov hyperbolic spaces. These spaces have been studied extensively in the last twenty years, and have found applications in group theory, geometric topology, Kleinian groups, as well as dynamics and rigidity theory. In the second part of the book, various aspects of the asymptotic geometry of arbitrary metric spaces are considered. It turns out that the boundary at infinity approach is not appropriate in the general case, but dimension theory proves useful for finding interesting results and applications. The text leads concisely to some central aspects of the theory. Each chapter concludes with a separate section containing supplementary results and bibliographical notes. Here the theory is also illustrated with numerous examples as well as relations to the neighboring fields of comparison geometry and geometric group theory. The book is based on lectures the authors presented at the

Steklov Institute in St. Petersburg and the University of Zurich. It addressed to graduate students and researchers working in geometry, topology, and geometric group theory.