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Titolo	Dimension and recurrence in hyperbolic dynamics [[electronic resource] /] / Luis Barreira
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Collana	Progress in mathematics ; ; 272
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Soggetti	Differentiable dynamical systems Hyperbolic groups Dimension theory (Topology)
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Dimension theory -- 2. Multifractal analysis : core theory -- 3. Multifractal analysis : further developments -- 4. Hyperbolicity and recurrence.
Sommario/riassunto	The main objective of this book is to give a broad unified introduction to the study of dimension and recurrence in hyperbolic dynamics. It includes the discussion of the foundations, main results, and main techniques in the rich interplay of four main areas of research: hyperbolic dynamics, dimension theory, multifractal analysis, and quantitative recurrence. It also gives a panorama of several selected topics of current research interest. More than half of the material appears here for the first time in book form, describing many recent developments in the area such as topics on irregular sets, variational principles, applications to number theory, measures of maximal dimension, multifractal nonrigidity, and quantitative recurrence. All the results are included with detailed proofs, many of them simplified or rewritten on purpose for the book. The text is self-contained and directed to researchers as well as graduate students that wish to have a global view of the theory together with a working knowledge of its

main techniques. It will also be useful as as basis for graduate courses in dimension theory of dynamical systems, multifractal analysis, and pointwise dimension and recurrence in hyperbolic dynamics.
