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Titolo	The Ricci flow in Riemannian geometry : a complete proof of the differentiable 1/4-pinching sphere theorem / / by Ben Andrews, Christopher Hopper
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Nota di contenuto	1 Introduction -- 2 Background Material -- 3 Harmonic Mappings -- 4 Evolution of the Curvature -- 5 Short-Time Existence -- 6 Uhlenbeck's Trick -- 7 The Weak Maximum Principle -- 8 Regularity and Long-Time Existence -- 9 The Compactness Theorem for Riemannian Manifolds -- 10 The F-Functional and Gradient Flows -- 11 The W-Functional and Local Noncollapsing -- 12 An Algebraic Identity for Curvature Operators -- 13 The Cone Construction of Böhm and Wilking -- 14 Preserving Positive Isotropic Curvature -- 15 The Final Argument.
Sommario/riassunto	This book focuses on Hamilton's Ricci flow, beginning with a detailed discussion of the required aspects of differential geometry, progressing through existence and regularity theory, compactness theorems for Riemannian manifolds, and Perelman's noncollapsing results, and culminating in a detailed analysis of the evolution of curvature, where recent breakthroughs of Böhm and Wilking and Brendle and Schoen have led to a proof of the differentiable 1/4-pinching sphere theorem.