

1. Record Nr.	UNINA9910554274503321
Titolo	Mean curvature flow : proceedings of the John H. Barrett Memorial Lectures held at the University of Tennessee, Knoxville, May 29-June 1, 2018 // edited by Theodora Bourni, Mat Langford
Pubbl/distr/stampa	Berlin, Germany ; ; Boston, Massachusetts : , : Walter de Gruyter GmbH, , [2020] ©2020
ISBN	3-11-061822-2 3-11-061836-2
Descrizione fisica	1 online resource (VIII, 141 p.)
Collana	De Gruyter Proceedings in Mathematics
Classificazione	SK 370
Disciplina	516.362
Soggetti	Flows (Differentiable dynamical systems) Geometric analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Foreword -- Contents -- Introducing Mean Curvature Flow -- Self-similar solutions of mean curvature flow -- Ancient solutions in geometric flows -- An extension to the Morse energy gradient flow -- Regularity of non-compact inverse mean curvature flow -- Area preserving curve shortening flow -- Second Order Renormalization Group Flow -- Analysis of Velázquez's solution to the mean curvature flow with a type II singularity -- Some recent applications of mean curvature flow with surgery -- Identifying shrinking solitons by their asymptotic geometries -- Geometric singularities under the Gigli-Mantegazza flow -- Pinched ancient solutions to high codimension mean curvature flow -- On the unknottedness of self shrinkers in $R^3$ -- Gluing constructions for self-translating and self-shrinking surfaces under mean curvature flow -- The level set flow of a hypersurface in $R^4$ of low entropy does not disconnect -- Application of Mean Curvature Flow for surface parametrizations
Sommario/riassunto	With contributions by leading experts in geometric analysis, this volume is documenting the material presented in the John H. Barrett Memorial Lectures held at the University of Tennessee, Knoxville, on

May 29 - June 1, 2018. The central topic of the 2018 lectures was mean curvature flow, and the material in this volume covers all recent developments in this vibrant area that combines partial differential equations with differential geometry.

---