

1. Record Nr.	UNINA9910254221703321
Titolo	Mathematical Progress in Expressive Image Synthesis III : Selected and Extended Results from the Symposium MEIS2015 // edited by Yoshinori Dobashi, Hiroyuki Ochiai
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2016
ISBN	981-10-1076-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (155 p.)
Collana	Mathematics for Industry, , 2198-350X ; ; 24
Disciplina	620
Soggetti	Applied mathematics Engineering mathematics Optical data processing Computer science—Mathematics Computer mathematics Computer-aided engineering Mathematical and Computational Engineering Computer Imaging, Vision, Pattern Recognition and Graphics Mathematical Applications in Computer Science Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Geometry -- Geometry and Mechanics of Fibers: Some Numerical Models -- Tetratisation of Triangular Meshes and Its Application in Shape Blending -- A Construction Method for Discrete Constant Negative Gaussian Curvature Surfaces -- Fabrication-Aware Geometry Processing -- Part II Artificial Animation -- Revisiting Vorticity: Pushing Fluid Solvers to the Next Level -- Active Comicing for Freehand Drawing Animation -- A Multilayered Model for Artificial Intelligence of Game Characters as Agent Architecture -- Part III Illusion, Patterns, and Visualization -- Visual Media Culture Supported by Human Depth Illusion -- Wang Tile Modeling of Wall Patterns -- High-Resolution Visualization Library for the Exascale Supercomputer -- Part IV Curves -- Drawing Curves -- Aesthetic Design with Log-Aesthetic Curves and

Sommario/riassunto

“Progress in Expressive Image Synthesis” (MEIS2015), was held in Fukuoka, Japan, September 25–27, 2015. The aim of the symposium was to provide a unique venue where various issues in computer graphics (CG) application fields could be discussed by mathematicians, CG researchers, and practitioners. Through the previous symposiums MEIS2013 and MEIS2014, mathematicians as well as CG researchers have recognized that CG is a specific and practical activity derived from mathematical theories. Issues found in CG broaden the field of mathematics and vice versa, and CG visualizes mathematical theories in an aesthetic manner. In this volume, the editors aim to provoke interdisciplinary research projects through the peer-reviewed papers and poster presentations at the this year’s symposium. This book captures interactions among mathematicians, CG researchers, and practitioners sharing important, state-of-the-art issues in graphics and visual perception. The book is suitable for all CG researchers seeking open problem areas and especially for those entering the field who have not yet selected a research direction.
