1. Record Nr. UNINA9910483481103321

Imagine math 7: between culture and mathematics // Michele Emmer, **Titolo** 

Marco Abate, editors

Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2020]

©2020

**ISBN** 3-030-42653-X

1 online resource (xxxv, 471 pages): illustrations (some color) Descrizione fisica

Disciplina 303.483

Soggetti Mathematics - Social aspects

> Mathematics and literature Mathematics in motion pictures **Engineering mathematics**

Computer graphics

Lingua di pubblicazione Inglese

**Formato** Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references.

Nota di contenuto Emmer M., Homage to Bauhaus -- Rottmann M., Paul's Klee "Honey

> Writing". Some reflections on the Relation of Automatism, Automation, Machines and Mathematics -- Strickland E., Maryam Mirzakhani: a Mathematical Polyglot -- Michele Emmer, From soap bubbles to fields medals -- Plutino A. and Rizzi A., Alternative Methods for Digital Contrast Restoration -- Bellotti S., Bottaro G., Plutino A., and Valsesia M., Mathematically-Based Algorithms for Film Digital Restoration --Emmer M., Homage to Octavia Spencer -- Abate M., Geometric Origami -- Beber A., Origami Tasseletion: design peperfolded geometric patterns -- Leopold C., Geometric Concept of a Smooth Staircase -Sinus Stairs -- Mazzout-Mis M., Visconti A., Tahayori H. and Ceria M., Sublime Experience: new Strategies for measuring the aesthetic impact of sublime -- Saracco A., Mathematics in Disney comics -- Iori T., The Language of Structures -- Marchetti E. and Rossi Costa L., Mathematical Aspects of Leonardo's Production in Milan -- Perano E. and Codegone M., A Mathematical Improvement of the Skate Curves --

Léblond-Levy J.M., Infinity in Physics -- Todesco G. M., Hyperbolic honeycomb -- Viganò L., Exploring Cybersecurity with Films and the Sommario/riassunto

Arts -- LiCalzi M., A Portrait of the Mathematical Tribe -- Chatirichvili O., Creation / Rapresentation / Transmission: Culture and/of Mathematicians' Autobiographies -- Magrone P. and Gasca M., Mathematical Imagination and the Preparation of the Child for Science: Sparks from Mary Everest Boole -- Tognato C., Antanas Mockus and the Civil Role of a Mathematician -- Toscano M. and Vaccaro A.M., François Le Lionnais and the Oulipo – The Unexpected Role of Mathematics in Literature -- Joao Santos T., Local Estimates for Minimizers, Embodied Techniques and (self) re-presentations within Performance Art -- Bordainne C. and Mondot A., Acqua Alta -- Rudi Matematici (Clerico R., Fabbri P. and Ortenzio F.), A Supposedly Fun Thing We Would Do Again. Imagine mathematics, imagine with the help of mathematics, imagine new worlds, new geometries, new forms. Imagine building mathematical models that make it possible to manage our world better, imagine solving great problems, imagine new problems never before thought of, imagine combining music, art, poetry, literature, architecture, theatre and cinema with mathematics. Imagine the unpredictable and sometimes counterintuitive applications of mathematics in all areas of human endeavour. This seventh volume starts with a homage to the Italian artist Mimmo Paladino who created exclusively for the Venice Conference 2019 ten original and unique

thought of, imagine combining music, art, poetry, literature, architecture, theatre and cinema with mathematics. Imagine the unpredictable and sometimes counterintuitive applications of mathematics in all areas of human endeavour. This seventh volume starts with a homage to the Italian artist Mimmo Paladino who created exclusively for the Venice Conference 2019 ten original and unique works of art paper dedicated to the themes of the meeting. A large section is dedicated to the most recent Fields Medals including a Homage to Maryam Mirzakhani including a presentation of the exhibition on soap bubbles in art and science that took place in 2019. A section is dedicated to cinema and theatre including the performances by Claire Bardainne & Adrien Mondot. A part of the conference focused on the community of mathematicians, their role in literature and even in politics with the extraordinary example of Antanas Mockus Major of Bogotá. Mathematics in the constructions of bridges, in particular in Italy in the Sixties was presented by Tullia Iori. A very particular contribution on Origami by a mathematician, Marco Abate and an artist, Alessandro Beber, And many other topics, As usual the topics are treated in a way that is rigorous but captivating, detailed and full of evocations. This is an all-embracing look at the world of mathematics and culture. This work is addressed to all those who have an interest in Mathematics.