

# Contents

<b>A Mathematician and an Artist. The Story of a Collaboration</b> .....	1
Richard S. Palais	
<b>Dimensions, a Math Movie</b> .....	11
Aurélien Alvarez and Jos Leys	
<b>Old and New Mathematical Models: Saving the Heritage of the Institut Henri Poincaré</b> .....	17
François Apéry	
<b>An Introduction to the Construction of Some Mathematical Objects</b> ....	29
Claude Paul Bruter	
<b>Computer, Mathematics and Art</b> .....	47
Jean-François Colonna	
<b>Structure of Visualization and Symmetry in Iterated Function Systems</b> .....	53
Jean Constant	
<b>M.C. Escher’s Use of the Poincaré Models of Hyperbolic Geometry</b> .....	69
Douglas Dunham	
<b>Mathematics and Music Boxes</b> .....	79
Vi Hart	
<b>My Mathematical Engravings</b> .....	85
Patrice Jeener	

<b>Knots and Links As Form-Generating Structures</b> .....	105
Dmitri Kozlov	
<b>Geometry and Art from the Cordovan Proportion</b> .....	117
Antonia Redondo Buitrago and Encarnación Reyes Iglesias	
<b>Dynamic Surfaces</b> .....	131
Simon Salamon	
<b>Pleasing Shapes for Topological Objects</b> .....	153
John M. Sullivan	
<b>Rhombopolyclonic Polygonal Rosettes Theory</b> .....	167
François Tard	
<b>Index</b> .....	177



<http://www.springer.com/978-3-642-24496-4>

Mathematics and Modern Art  
Proceedings of the First ESMA Conference, held in  
Paris, July 19-22, 2010  
Bruter, C. (Ed.)  
2012, VIII, 178 p., Hardcover  
ISBN: 978-3-642-24496-4