

Cambridge University Press

978-0-521-00419-0 - The Eightfold Way: The Beauty of Klein's Quartic Curve

Edited by Silvio Levy

Table of Contents

[More information](#)

Contents

Preface: MSRI and the Klein Quartic	ix
The Eightfold Way: A Mathematical Sculpture by Helaman Ferguson WILLIAM P. THURSTON	1
The Geometry of Klein's Riemann Surface HERMANN KARCHER AND MATTHIAS WEBER	9
The Klein Quartic in Number Theory NOAM ELKIES	51
Hurwitz Groups and Surfaces A. MURRAY MACBEATH	103
From the History of a Simple Group JEREMY GRAY	115
Eightfold Way: The Sculpture HELAMAN AND CLAIRE FERGUSON	133
Invariants of $SL_2(\mathbb{F}_q) \cdot \text{Aut}(\mathbb{F}_q)$ Acting on \mathbb{C}^n for $q = 2n \pm 1$ ALLAN ADLER	175
Hirzebruch's Curves $F_1, F_2, F_4, F_{14}, F_{28}$ for $\mathbb{Q}(\sqrt{7})$ ALLAN ADLER	221
On the Order-Seven Transformation of Elliptic Functions FELIX KLEIN	287