

# Table of Contents

Approximate Parametrisation of Confidence Sets . . . . .	1
<i>Zbyněk Šír</i>	
Challenges in Surface-Surface Intersections . . . . .	11
<i>Vibeke Skjell</i>	
Computing the Topology of Three-Dimensional Algebraic Curves . . . . .	27
<i>G. Galletier, A. Labrouzy, B. Mourrain, J.P. Técourt</i>	
Distance Properties of $\epsilon$ -Points on Algebraic Curves . . . . .	45
<i>Sonia Pérez-Díaz, Juana Sendra, J.Rafael Sendra</i>	
Distance Separation Measures Between Parametric Curves and Surfaces Toward Intersection and Collision Detection Applications . . . . .	63
<i>Gershon Elber</i>	
Elementary Theory of Del Pezzo Surfaces . . . . .	77
<i>Josef Schicho</i>	
The Geometry of the Tangent Developable . . . . .	95
<i>Pål Hermunn Johansen</i>	
Numerical and Algebraic Properties of Bernstein Basis Resultant Matrices . . . . .	107
<i>Joab R. Winkler</i>	
Polynomial $C^2$ Spline Surfaces Guided by Rational Multisided Patches . . . . .	119
<i>Kęstutis Karčiauskas, Jörg Peters</i>	
A Recursive Taylor Method for Algebraic Curves and Surfaces . . . . .	135
<i>Huahao Shou, Ralph Martin, Guojin Wang, Adrian Bowyer, Irina Voiculescu</i>	
Self-Intersection Problems and Approximate Implicitization . . . . .	155
<i>Jan B. Thomassen</i>	
Singularities of Some Projective Rational Surfaces . . . . .	171
<i>Ragni Piene</i>	
On the Shape Effect of a Control Point: Experimenting with NURBS Surfaces . . . . .	183
<i>Panagiotis Kaklis, Spyridon Dellas</i>	
Third Order Invariants of Surfaces . . . . .	193
<i>Jens Gravesen</i>	
Universal Rational Parametrizations and Spline Curves on Toric Surfaces . . . . .	213
<i>Rimvydas Krasauskas, Margarita Kazakevičiūtė</i>	
Panel Discussion . . . . .	233



<http://www.springer.com/978-3-540-23274-2>

Computational Methods for Algebraic Spline Surfaces

ESF Exploratory Workshop

Dokken, T.; Jüttler, B. (Eds.)

2005, VIII, 238 p., Hardcover

ISBN: 978-3-540-23274-2