

Contents

Part I Invited Surveys

Emergent Behaviour in Large Electrical Networks <i>Darryl P. Almond, Chris J. Budd, Nick J. McCullen</i>	3
Algorithms and Error Bounds for Multivariate Piecewise Constant Approximation <i>Oleg Davydov</i>	27
Anisotropic Triangulation Methods in Adaptive Image Approximation <i>Laurent Demaret, Armin Iske</i>	47
Form Assessment in Coordinate Metrology <i>Alistair B. Forbes, Hoang D. Minh</i>	69
Discontinuous Galerkin Methods for Linear Problems: An Introduction <i>Emmanuil H. Georgoulis</i>	91
A Numerical Analyst's View of the Lattice Boltzmann Method <i>Jeremy Levesley, Alexander N. Gorban, David Packwood</i>	127
Approximating Probability Measures on Manifolds via Radial Basis Functions <i>Jeremy Levesley, Xingping Sun</i>	151

Part II Contributed Research Papers

Modelling Clinical Decay Data Using Exponential Functions <i>Maurice G. Cox</i>	183
---	-----

Towards Calculating the Basin of Attraction of Non-Smooth Dynamical Systems Using Radial Basis Functions <i>Peter Giesl</i>	205
Stabilizing Lattice Boltzmann Simulation of Fluid Flow past a Circular Cylinder with Ehrenfests' Limiter <i>Tahir S. Khan, Jeremy Levesley</i>	227
Fast and Stable Interpolation of Well Data Using the Norm Function <i>Brian Li, Jeremy Levesley</i>	241
Algorithms and Iterate Programs for Weighted Low-Rank Approximation with Missing Data <i>Ivan Markovsky</i>	255
On Bivariate Interpolatory Mask Symbols, Subdivision and Refinable Functions <i>A. Fabien Rabarison, Johan de Villiers</i>	275
Model and Feature Selection in Metrology Data Approximation <i>Xin-She Yang, Alistair B. Forbes</i>	293