Complete list of publications:
Charles Elliott

September 13, 2022

HTML Links to Bibliographic and Bibliometric Databases:

• Web of Science • MathSciNet • Google Scholar

1. Books

180. C. M. Elliott and S. McKee, editors *Industrial Numerical Analysis* Clarendon Press, Oxford 256pp (1986)

179. C. M. Elliott and J.R. Ockendon *Weak and variational methods for moving boundary problems* Pitman, London 213 pp (1982)

2. Submitted for publication; Published on arXiv

178. C.M.Elliott, T.Ranner and P. Stepanov *Evolving finite elements for advection diffusion with an evolving interface* arXiv:2208.04850

177. D. Caetano, C. M. Elliott, M. Grasselli and Andrea Poiatti *Regularisation and separation for evolving surface Cahn-Hilliard equations* arXiv:2205.09822

176. O. Dunbar, C. M. Elliott and L. M. Kreusser *Models for information propagation on graphs* arXiv:2201.07577

175. A.Alphonse, D. Caetano, A. Djurdjevac and C. M. Elliott *Function spaces, time derivatives and compactness for evolving families of Banach spaces* arXiv:2105.07908

3. Research articles in refereed journals and collections

174. C. M. Elliott, H.Garcke and B. Kovacs *Numerical analysis for the interaction of mean curvature flow and diffusion on closed surfaces* Numerische Mathematik (2022) [**151**] 873–925

173. C. M. Elliott, L. Hatcher and B. Stinner *On the sharp interface limit of a phase field model for near spherical two phase biomembranes* Interfaces and Free Boundaries (2022) [**24**] 263–286

172. C. M. Elliott and P. J. Herbert *A formula for membrane mediated point particle interactions on near spherical biomembranes* Interfaces and Free Boundaries (2022) [**24**] 1–34

171. D. Caetano and C. M. Elliott *Cahn Hilliard equations on an evolving surface* European Journal of Applied Mathematics (2021) **32** 937–1000

170. C. M. Elliott and L. Hatcher *Domain formation via phase separation for spherical biomembranes with small deformations* European Journal of Applied Mathematics (2021) [**32**] 1127–1152

169. C. M. Elliott and T. Ranner *A unified theory for continuous in time evolving finite element space approximations to partial differential equations in evolving domains* IMA Journal of Numerical Analysis **41** (2021) 1696–1845

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167. L. Church, A. Djurdjevac and C. M. Elliott *A domain mapping approach for elliptic equations posed on random bulk and surface domains* Numerische Mathematik **146** (2020) 1–49

166. C. M. Elliott and P. J. Herbert *Second order splitting of a class of fourth order PDEs with point constraints* Mathematics of Computation **89** (2020) 2613–2648

165. O. R. A. Dunbar, M. M. Dunlop, C. M. Elliott, Viet Ha Hoang, A. M. Stuart *Reconciling Bayesian and Total Variation Methods for Binary Inversion* SIAM Journal on Scientific Computing **42** (2020) A1984–A2013

164. O. R. A. Dunbar and C. M. Elliott *Binary recovery via phase field regularization for first-arrival traveltime tomography* Inverse Problems **35** (2019)

163. C. M. Elliott, H. Fritz and G. Hobbs *Second order splitting for a class of fourth order equations* Mathematics of Computation **88** (2019) 2605–2634

162. K. Deckelnick, C. M. Elliott and Tatsu-Hiko Miura *Hamilton Jacobi equations on an evolving surface* Mathematics of Computation **88** (2019) 2635–2664

161. A. Djurdjevac, C. M. Elliott, R. Kornhuber and T. Ranner *Evolving surface finite element methods for random advection-diffusion equations* SIAM/ASA Journal on Uncertainty Quantification **6** (2018) 15444-1592

160. A. Alphonse, C. M. Elliott and J. Terra *A coupled ligand receptor model bulk-surface system on a moving domain: well posedness, regularity and convergence to equilibrium* SIAM Journal on Mathematical Analysis **50** (2018) 1544 –1592

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155. C. M. Elliott and H. Fritz *On algorithms with good mesh properties for problems with moving boundaries based on the Harmonic Map Heat Flow and the DeTurck trick* SMAI Journal of Computational Mathematics **2** (2016) 141–176

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153. A. Alphonse and C. M. Elliott *Well posedness of a fractional porous medium equation on an evolving surface* Nonlinear Analysis **137** (2016) 3–42

152. C. Brett, A. S. Dedner and C. M. Elliott *Optimal control of elliptic PDEs at points* IMA Journal of Numerical Analysis **36** (3) (2016) 985–1001

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142. K. P. Deckelnick, C. M. Elliott and T. Ranner *Unfitted finite element methods using bulk meshes for surface partial differential equations* SIAM Journal on Numerical Analysis **52** (2014) 2137–2162

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