

## References

- [AES15] A. Alphonse, C.M. Elliott, and B. Stinner. An abstract framework for parabolic PDEs on evolving spaces. *Portugaliae Mathematica*, 72(1):1–46, 2015.
- [AL15] G. Akrivis and C. Lubich. Fully implicit, linearly implicit and implicit-explicit backward difference formulae for quasi-linear parabolic equations. *Numerische Mathematik*, 131(4):713–735, 2015.
- [Aub98] T. Aubin. *Some Nonlinear Problems in Riemannian Geometry*. Springer Monographs in Mathematics. Springer, Berlin, first edition, 1998.
- [Dah78] G. Dahlquist. G-stability is equivalent to A-stability. *BIT*, 18:384–401, 1978.
- [Dem09] A. Demlow. Higher-order finite element methods and pointwise error estimates for elliptic problems on surfaces. *SIAM J. Numer. Anal.*, 47(2):805–807, 2009.
- [Dun85] D.A. Dunavant. High degree efficient symmetrical Gaussian quadrature rules for the triangle. *International journal for numerical methods in engineering*, 21(6):1129–1148, 1985.
- [Dzi88] G. Dziuk. Finite elements for the Beltrami operator on arbitrary surfaces. *Partial differential equations and calculus of variations, Lecture Notes in Math.*, 1357, Springer, Berlin, pages 142–155, 1988.
- [Dzi90] G. Dziuk. An algorithm for evolutionary surfaces. *Numerische Mathematik*, 58(1):603–611, 1990.
- [DE07a] G. Dziuk and C.M. Elliott. Finite elements on evolving surfaces. *IMA Journal of Numerical Analysis*, 27(2):262–292, 2007.
- [DE07b] G. Dziuk and C.M. Elliott. Surface finite elements for parabolic equations. *J. Comput. Math.*, 25(4):385–407, 2007.
- [DE12] G. Dziuk and C.M. Elliott. Fully discrete evolving surface finite element method. *SIAM Journal on Numerical Analysis*, 50(5):2677–2694, 2012.
- [DE13a] G. Dziuk and C.M. Elliott. Finite element methods for surface PDEs. *Acta Numerica*, 22:289–396, 2013.
- [DE13b] G. Dziuk and C.M. Elliott.  $L^2$ -estimates for the evolving surface finite element method. *Mathematics of Computation*, 82(281):1–24, 2013.
- [DKM13] G. Dziuk, D. Kröner, and T. Müller. Scalar conservation laws on moving hypersurfaces. *Interfaces and Free Boundaries*, 15(2):203–236, 2013.
- [DLM12] G. Dziuk, Ch. Lubich, and D.E. Mansour. Runge–Kutta time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 32(2):394–416, 2012.
- [ER13] C. M. Elliott and T. Ranner. Finite element analysis for a coupled bulk-surface partial differential equation. *IMA J. Numer. Anal.*, 33(2):377–402, 2013.

- [ES12] C.M. Elliott and V. Styles. An ALE ESFEM for solving PDEs on evolving surfaces. *Milan Journal of Mathematics*, 80(2):469–501, 2012.
- [GT83] D. Gilbarg and N.S. Trudinger. *Elliptic partial differential equations of second order*. Springer, Berlin, second edition, 1983.
- [HW96] E. Hairer and G. Wanner. *Solving Ordinary Differential Equations II.: Stiff and differential-algebraic problems*. Springer, Berlin, Second edition, 1996.
- [LM15] Ch. Lubich and D.E. Mansour. Variational discretization of wave equations on evolving surfaces. *Mathematics of Computation*, 84(292):513–542, 2015.
- [LMV13] Ch. Lubich, D.E. Mansour, and C. Venkataraman. Backward difference time discretization of parabolic differential equations on evolving surfaces. *IMA Journal of Numerical Analysis*, 33(4):1365–1385, 2013.
- [LO95] Ch. Lubich and A. Ostermann. Runge–Kutta approximation of quasi-linear parabolic equations. *Mathematics of Computation*, 64.:601–627, 1995.
- [Man13] D.E. Mansour. *Numerical Analysis of Partial Differential Equations on Evolving Surfaces*. PhD thesis, Universität Tübingen, 2013. <http://hdl.handle.net/10900/49925>.
- [NO81] O. Nevanlinna and F. Odeh. Multiplier techniques for linear multistep methods. *Numer. Funct. Anal. Optim.*, 3(4):377–423, 1981.
- [PS04] P-O. Persson and G. Strang. A simple mesh generator in MATLAB. *SIAM Review*, 46(2):329–345, 2004.
- [Tho06] V. Thomée. *Galerkin finite element methods for parabolic problems*, volume 25 of *Springer Series in Computational Mathematics*. Springer-Verlag, Berlin, second edition, 2006.