

Anders Logg

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Bio

Date of birth: January 7, 1976
Place of birth: Mölndal, Sweden
Citizenship: Swedish
Family: Married to Anna Logg, father of Axel, Arvid and Aron Logg

Employment

2011 – present Senior Research Scientist, Simula Research Laboratory, Norway.
2006 – present Associate Professor, Dept. Informatics, University of Oslo, Norway.
2006 – 2011 Research Scientist, Simula Research Laboratory, Norway.
2004 – 2006 Research Assistant Professor, TTI at Chicago, USA.
1999 – 2004 Ph.D. Student, Chalmers University of Technology, Sweden.
1996 – 2004 Teaching Assistant, Chalmers University of Technology, Sweden.

Degrees

2010 Docent in Applied Mathematics, Chalmers University of Technology, Sweden.
Docent lecture: *Automated Scientific Computing*
2004 Ph.D. in Applied Mathematics, Chalmers University of Technology, Sweden.
Thesis title: *Automation of Computational Mathematical Modeling*
Advisor: Prof. Claes Johnson, Prof. Kenneth Eriksson
2001 Lic.Eng. in Applied Mathematics, Chalmers University of Technology, Sweden.
Thesis title: *Multi-Adaptive Galerkin Methods for ODEs*
Advisor: Prof. Claes Johnson
1999 M.Sc. in Engineering Physics, Chalmers University of Technology, Sweden.
Thesis title: *A Multi-Adaptive ODE Solver*
Advisor: Prof. Claes Johnson
Grade average: 4.97 / 5.0 (99.4%)

Professional Activities

Group leader for the *Automated and Distributed Computing* research group at Simula Research Laboratory, Oslo, Norway.

Project leader for the research project *Robust Flow Solvers* at Simula Research Laboratory, Oslo, Norway.

Project leader for the research project *Automation of Error Control with Application to Fluid-Structure Interaction in Biomedicine* at Simula Research Laboratory, Oslo, Norway.

Organizer (with J. Korelc, G. N. Wells, D. Eyheramendy and H. Leclerc) of the mini-symposium *Automation of Computational Modeling by Advanced Software Tools and Techniques* at ECCOMAS, Vienna, Austria (2012).

Organizer (with K.-A. Mardal and G. N. Wells) of the mini-symposium *Automated Solution of Differential Equations* at the SIAM Conference on Computational Science and Engineering, Reno, USA (2011).

Organizer (with G. N. Wells) of the mini-symposium *Automated Computing* at the International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece (2010).

Organizer of the mini-symposium *Finite Element Software Development* at the European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Uppsala, Sweden (2009).

Organizer (with K.-A. Mardal and O. Skavhaug) of the workshop *FEniCS'09: Scientific Computing in the New Millennium* at Simula Research Laboratory, Oslo, Norway (2009).

Organizer (with M. G. Larson) of the workshop *Finite Element Methods for Fluids and Fluid-Structure Interaction* at Simula Research Laboratory, Oslo, Norway (2008).

Organizer of the workshop *FEniCS'05: Automated Computational Mathematical Modeling* at Toyota Technological Institute at Chicago, USA (2005).

Administrator of adjudication committee at Ph.D. thesis defense, University of Oslo, Norway (2009). Member of Ph.D thesis defense committee, Chalmers University of Technology, Sweden (2010).

Referee for *SIAM Review*, *SIAM Journal on Scientific Computing*, *SIAM Journal on Numerical Analysis*, *ACM Transactions on Mathematical Software*, *BIT Numerical Mathematics*, *Journal of Computational and Applied Mathematics*, *Journal of Computational Physics*, *IMA Journal of Numerical Analysis*, *Simulation Modelling Practice and Theory* and *Scientific Programming*.

System administrator for the FEniCS Project (2003–2005), system administrator for Chalmers Finite Element Center (1999–2004), administrator of Chalmers Finite Element Center Preprint Series (1999–2004).

Awards

Finalist for the ECCOMAS Ph.D. Thesis Award, nominated by the NoACM (Nordic Association for Computational Mechanics), one of 18 European finalists (2005).

Recipient of the John Ericsson Medal, awarded to the students with the best grade average (4.97/5.0) at Chalmers University of Technology, Sweden (1999).

Recipient of the Rotary grant, awarded to the student with the best grade average (5.0/5.0) at Gullmarsgymnasiet, Sweden (1995).

Silver medal at the International Chemistry Olympiad, Beijing, China, first place in the Swedish final (1995).

Bronze medal at the International Chemistry Olympiad, Oslo, Norway, fourth place in the Swedish final (1994).

Funding

Recipient of the *Outstanding Young Investigator Grant* (10 MNOK, NFR 180450) from the Research Council of Norway for the project *Automation of Error Control with Application to Fluid–Structure Interaction in Biomedicine* (2007). The grant period is 2007–2011 and covers the employment of two post-doctoral researchers and three Ph.D. students.

Teaching

Winter School in Computational Mathematics (lecturer), Geilo, Norway (2012).

Developing and lecturing two courses at the University of Oslo, *Introduction to Finite Element Methods* and *Advanced Finite Element Methods* (2008–2012).

Winter School in Computational Mathematics (lecturer), Geilo, Norway (2006).

Developing and lecturing one course at Chalmers University of Technology (2002–2004).

Teaching assistant in several courses at Chalmers University of Technology (1996–2004).

Students and Postdocs

Have supervised 1 Ph.D. student, co-supervised 1 Ph.D. student, currently supervising 2 Ph.D. students.

Have supervised 3 M.Sc. students, currently supervising 3 M.Sc. students.

Have supervised two postdocs, Harish Narayanan (2008–2010) and Marie Rognes (2009–2010).

Software

Developer of several free/open-source scientific software packages, including DOLFIN, FFC, UFC, UFL, Exterior, Puffin (FEniCS Project, <http://www.fenicsproject.org>).

Invited Talks (selection)

The FEniCS Project (invited talk), EuroSciPy 2011 / Python in Physics, Ecole normale supérieure, Paris, France (2011).

Automated Scientific Computing (keynote speaker), 23rd Chemnitz FEM Symposium, Germany (2010).

Automatic Code Generation and the FEniCS Project (invited talk), Opportunities and Challenges in Computational Geodynamics, Caltech, USA (2009).

The FEniCS Project (invited talk), Workshop on Data Structures for Finite Element and Finite Volume Computations, Freie Universität Berlin, Germany (2008).

Automating the Finite Element Method (invited lecture series), Sixth Winter School in Computational Mathematics, Geilo, (2006).

A New Family of Methods for Global Error Control in ODE Solvers (invited talk), Simula Research Laboratory, Oslo, Norway (2005).

Explicit Time-Stepping for Stiff ODEs (invited talk), Centrum Wiskunde & Informatica, Amsterdam, Holland (2003).

Articles in International Journals

- [1] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs I. *SIAM J. Sci. Comput.*, vol. 24(6), pp. 1879–1902, 2003.
- [2] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs II: Implementation and Applications. *SIAM J. Sci. Comput.*, vol. 25(4), pp. 1119–1141, 2003.
- [3] K. ERIKSSON, C. JOHNSON AND A. LOGG. Explicit Time-Stepping for Stiff ODEs. *SIAM J. Sci. Comput.*, vol. 25(4), pp. 1142–1157, 2003.
- [4] A. LOGG. Multi-Adaptive Time-Integration. *Applied Numerical Mathematics*, vol. 48(3–4), pp. 339–354, 2004.
- [5] J. JANSSON, C. JOHNSON AND A. LOGG. Computational Modeling of Dynamical Systems. *Mathematical Models and Methods in Applied Sciences*, vol. 15(3), pp. 471–481, 2005.
- [6] R. C. KIRBY, M. G. KNEPLEY, A. LOGG AND L. R. SCOTT. Optimizing the Evaluation of Finite Element Matrices. *SIAM J. Sci. Comput.*, vol. 27(3), pp. 741–758, 2005.
- [7] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs III: A Priori Error Estimates. *SIAM J. Numer. Anal.*, vol. 43(6), pp. 2624–2646, 2006.
- [8] R. C. KIRBY AND A. LOGG. A Compiler for Variational Forms. *ACM Transactions on Mathematical Software*, vol. 32(3), pp. 417–444, 2006.
- [9] R. C. KIRBY, A. LOGG, L. R. SCOTT AND A. R. TERREL. Topological Optimization of the Evaluation of Finite Element Matrices. *SIAM J. Sci. Comput.*, vol. 28(1), pp. 224–240, 2006.
- [10] A. LOGG. Automating the Finite Element Method. *Archives of Computational Methods in Engineering*, vol. 14(2), pp. 93–138, 2007.
- [11] R. C. KIRBY AND A. LOGG. Efficient Compilation of a Class of Variational Forms. *ACM Transactions on Mathematical Software*, vol. 33(3), 2007.
- [12] J. JANSSON AND A. LOGG. Algorithms and Data Structures for Multi-Adaptive Time-Stepping. *ACM Trans. Math. Software*, vol. 35(3), pp. 1–24, 2008.
- [13] R. C. KIRBY AND A. LOGG. Benchmarking Domain-Specific Compiler Optimizations for Variational Forms. *ACM Transactions on Mathematical Software*, vol. 35(2), pp. 1–18, 2008.
- [14] K. B. OELGAARD, A. LOGG AND G. N. WELLS. Automated Code Generation for Discontinuous Galerkin Methods. *SIAM J. Sci. Comput.*, vol. 31(2), pp. 849–864, 2008.
- [15] M. S. ALNÆS, A. LOGG, K.-A. MARDAL, O. SKAVHAUG AND H. P. LANGTANGEN. Unified Framework for Finite Element Assembly. *International Journal of Computational Science and Engineering*, vol. 4(4), pp. 231–244, 2009.
- [16] A. LOGG. Efficient Representation of Computational Meshes. *International Journal of Computational Science and Engineering*, vol. 4(4), pp. 283–295, 2009.
- [17] M. ROGNES, R. C. KIRBY AND A. LOGG. Efficient Assembly of $H(\text{div})$ and $H(\text{curl})$ Conforming Finite Elements. *SIAM J. Sci. Comput.*, vol. 31(6), pp. 4130–4151, 2009.
- [18] A. LOGG AND G. N. WELLS. DOLFIN: Automated Finite Element Computing. *ACM Transactions on Mathematical Software*, vol. 37(2), 2010.
- [19] K. SELIM, A. LOGG AND M. G. LARSON. An Adaptive Finite Element Splitting Method for the Incompressible Navier-Stokes Equations. *Computer Methods in Applied Mechanics and Engineering*, vol. 209–212, pp. 54–65, 2012.
- [20] M. ROGNES AND A. LOGG. Automated Goal-Oriented Error Control I: Stationary Variational Problems. Submitted to journal for publication, 2010.

- [21] B. KEHLET AND A. LOGG. Long-Time Computability of the Lorenz System. Submitted to journal for publication, 2010.
- [22] K. SELIM, A. LOGG, H. NARAYANAN AND M. G. LARSON. An Adaptive Finite Element Method for Fluid-Structure Interaction. Submitted to journal for publication, 2011.
- [23] A. MASSING, M. G. LARSON AND A. LOGG. Efficient Implementation of Finite Element Methods on Non-Matching and Overlapping Meshes in 3D. Submitted to journal for publication, 2011.

Books

- [1] J. HOFFMAN, C. JOHNSON AND A. LOGG. Dreams of Calculus: Perspectives on Mathematics Education, *Springer*, 2004.
- [2] A. LOGG, K.-A. MARDAL, G. N. WELLS ET AL.. Automated Solution of Differential Equations by the Finite Element Method, *Springer*, 2011.

Chapters in Books

- [1] K. ERIKSSON, C. JOHNSON AND A. LOGG. Adaptive Computational Methods for Parabolic Problems. In *Encyclopedia of Computational Mechanics*, edited by E. Stein, R. d. Borst and T. J. R. Hughes, Wiley Press, 2004.
- [2] A. LOGG, K.-A. MARDAL, M. S. ALNÆS, H. P. LANGTANGEN AND O. SKAVHAUG. A Hybrid Approach to Efficient Finite Element Code Development. In *Petascale Computing: Algorithms and Applications*, edited by D. A. Bader, Chapman and Hall, 2007.
- [3] A. LOGG. Att Lösa En Differentialekvation. In *Människor och matematik*, edited by O. Helenius and K. Wallby, Nationellt centrum för matematikutbildning, NCM, 2008.
- [4] A. LOGG, H. P. LANGTANGEN AND X. CAI. Past and Future Perspectives on Scientific Software. In *Simula Research Laboratory - by thinking constantly about it*, edited by A. Tveito, A. M. Bruaset and O. Lysne, Springer, 2009.
- [5] R. C. KIRBY AND A. LOGG. The Finite Element Method. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [6] R. C. KIRBY, A. LOGG AND A. R. TERREL. Common and Unusual Finite Elements. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [7] R. C. KIRBY AND A. LOGG. Finite Element Variational Forms. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [8] A. LOGG, K.-A. MARDAL AND G. N. WELLS. Finite Element Assembly. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [9] R. C. KIRBY AND A. LOGG. Tensor Representation of Finite Element Variational Forms. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [10] R. C. KIRBY, M. G. KNEPLEY, A. LOGG, L. R. SCOTT AND A. R. TERREL. Discrete Optimization of Finite Element Matrix Evaluation. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.

- [11] A. LOGG, G. N. WELLS AND J. HAKE. DOLFIN: a C++/Python Finite Element Library. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [12] A. LOGG, K. B. OELGAARD, M. ROGNES AND G. N. WELLS. FFC: the FEniCS Form Compiler. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [13] R. C. KIRBY AND A. LOGG. FErari: an Optimizing Compiler for Variational Forms. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [14] M. S. ALNÆS, A. LOGG AND K.-A. MARDAL. UFC: a Finite Element Code Generation Interface. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [15] K. VALEN-SENDSTAD, A. LOGG, K.-A. MARDAL, H. NARAYANAN AND M. MORTENSEN. A Comparison of Finite Element Schemes for the Incompressible Navier-Stokes Equations. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.
- [16] K. VALEN-SENDSTAD, K.-A. MARDAL AND A. LOGG. Computational Hemodynamics. In *Automated Solution of Differential Equations by the Finite Element Method*, edited by A. Logg, K.-A. Mardal and G. N. Wells, Springer, 2011.

Refereed Proceedings

- [1] A. LOGG. Efficient Representation of Computational Meshes. In *MekIT'07*, 2007
- [2] M. SIKLOSI, O. E. JENSEN, R. H. TEW AND A. LOGG. Multiscale Modeling of the Acoustic Properties of Lung Parenchyma. In *Mathematical and numerical modelling of the human lung*, 2008
- [3] K. SELIM AND A. LOGG. Simulating Heart Valve Dynamics in FEniCS. In *MekIT'09*, 2009
- [4] B. KEHLET AND A. LOGG. A Reference Solution for the Lorenz System on $[0, 1000]$. In *AIP Conference Proceedings (ICNAAM 2010)*, 2010
- [5] A. LOGG AND G. WELLS. Building Flexible User Interfaces for Solving PDEs. In *AIP Conference Proceedings (ICNAAM 2010)*, 2010
- [6] A. MASSING, M. G. LARSON AND A. LOGG. Towards an Implementation of Nitsche's Method on Overlapping Meshes in 3D. In *AIP Conference Proceedings (ICNAAM 2010)*, 2010
- [7] M. ROGNES AND A. LOGG. Exploring Automated Adaptivity and Error Control. In *AIP Conference Proceedings (ICNAAM 2010)*, 2010
- [8] G. BALABAN, A. LOGG AND M. ROGNES. A Newton Method for Fluid-Structure Interaction Using Full Jacobians Based on Automatic Form Differentiation. Submitted to *Proceedings of ECCOMAS 2012*, 2011
- [9] M. E. ROGNES, B. KEHLET AND A. LOGG. Automatically Generated Solvers for Variational Formulations of Time-Dependent Partial Differential Equations. Submitted to *Proceedings of ECCOMAS 2012*, 2011

Conference Preceedings

- [1] C. JOHNSON, J. HOFFMAN AND A. LOGG. Topics in Adaptive Computational Methods for Differential Equations. In *CEDYA 2001: Congreso de Ecuaciones Diferenciales y Aplicaciones*, 2001
- [2] J. HOFFMAN, C. JOHNSON AND A. LOGG. Mathematics and Computation. In *Stockholm Intellegencer: Fourth European Congress of Mathematics*, 2004
- [3] A. LOGG. Automated Solution of Differential Equations. In *Sixth International Congress on Industrial Applied Mathematics (ICIAM07) and GAMM Annual Meeting, Zürich 2007*, 2007
- [4] K. B. OELGAARD, G. N. WELLS AND A. LOGG. Automated Computational Modelling for Solid Mechanics. In *IUTAM Symposium on Theoretical, Modelling and Computational Aspects of Inelastic Media*, 2008
- [5] H. P. LANGTANGEN AND A. LOGG. Trends in Computational Mechanics Software. In *21st Nordic Seminar on Computational Mechanics*, 2008
- [6] H. NARAYANAN, K. GARIKIPATI AND A. LOGG. Collaborative Computational Frameworks and the Growth Problem. In *The Mathematics of Growth and Remodelling of Soft Biological Tissues, Mathematisches Forschungsinstitut Oberwolfach Reports*, 2008
- [7] A. LOGG. An Overview of the FEniCS Project. In *21st Nordic Seminar on Computational Mechanics*, 2008

Technical Reports

- [1] A. LOGG. Multi-Adaptive Error Control for ODEs, Oxford University Computing Laboratory NA Group, 1998
- [2] A. LOGG. A Multi-Adaptive ODE-Solver, Finite Element Center, 2000
- [3] A. LOGG. Multi-Adaptive Error Control for ODEs, Finite Element Center, 2000
- [4] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs I: Theory and Algorithms, Finite Element Center, 2001
- [5] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs II: Applications, Finite Element Center, 2001
- [6] A. LOGG. Topics in Adaptive Computational Methods for Differential Equations, Finite Element Center, 2001
- [7] J. HOFFMAN AND A. LOGG. DOLFIN: Dynamic Object Oriented Library for FINite Element Computation, Finite Element Center, 2002
- [8] K. ERIKSSON, C. JOHNSON AND A. LOGG. Explicit Time-Stepping for Stiff ODEs, Finite Element Center, 2002
- [9] A. LOGG. Multi-Adaptive Time Integration, Finite Element Center, 2003
- [10] K. ERIKSSON, C. JOHNSON AND A. LOGG. Adaptive Computational Methods for Parabolic Problems, Finite Element Center, 2003
- [11] T. DUPONT, J. HOFFMAN, C. JOHNSON, R. C. KIRBY, M. G. LARSON, A. LOGG AND L. R. SCOTT. The FEniCS Project, Finite Element Center, 2003
- [12] A. LOGG. Interpolation Estimates for Piecewise Smooth Functions in One Dimension, Finite Element Center, 2004

- [13] A. LOGG. Estimates of Derivatives and Jumps Across Element Boundaries for Multi-Adaptive Galerkin Solutions of ODEs, Finite Element Center, 2004
- [14] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs III: Existence and Stability, Finite Element Center, 2004
- [15] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs IV: A Priori Error Estimates, Finite Element Center, 2004
- [16] J. JANSSON AND A. LOGG. Multi-Adaptive Galerkin Methods for ODEs V: Stiff Problems, Finite Element Center, 2004
- [17] J. JANSSON AND A. LOGG. Algorithms for Multi-Adaptive Time-Stepping, Finite Element Center, 2004
- [18] J. JANSSON AND A. LOGG. Simulation of Mechanical Systems With Individual Time Steps, Finite Element Center, 2004
- [19] J. JANSSON, C. JOHNSON AND A. LOGG. Computational Modeling of Dynamical Systems, Finite Element Center, 2004
- [20] R. C. KIRBY AND A. LOGG. A Compiler for Variational Forms, Finite Element Center, 2005
- [21] R. C. KIRBY, A. LOGG, L. R. SCOTT AND A. R. TERREL. Topological Optimization of the Evaluation of Finite Element Matrices, Finite Element Center, 2005
- [22] A. LOGG. Automating the Finite Element Method, Finite Element Center, 2006
- [23] J. JANSSON AND A. LOGG. Algorithms and Data Structures for Multi-Adaptive Time-Stepping, Finite Element Center, 2006
- [24] R. C. KIRBY AND A. LOGG. Efficient Compilation of a Class of Variational Forms, Finite Element Center, 2006
- [25] A. LOGG. Efficient Representation of Computational Meshes, Finite Element Center, 2007
- [26] R. C. KIRBY AND A. LOGG. Benchmarking Domain-Specific Compiler Optimizations for Variational Forms, Finite Element Center, 2007

Manuals

- [1] M. S. ALNÆS AND A. LOGG. UFL Specification and User Manual, 2009
- [2] M. S. ALNÆS, A. LOGG, K.-A. MARDAL, O. SKAVHAUG AND H. P. LANGTANGEN. UFC Specification and User Manual, 2009
- [3] J. HOFFMAN AND A. LOGG. Puffin User Manual, 2004
- [4] A. LOGG. FFC User Manual, 2007
- [5] A. LOGG AND G. N. WELLS. DOLFIN User Manual, 2007

Theses

- [1] A. LOGG. A Multi-Adaptive ODE-Solver, M.Sc. Thesis, Chalmers University of Technology, 1998.
- [2] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs, Lic. Thesis, Chalmers University of Technology, 2001.
- [3] A. LOGG. Automation of Computational Mathematical Modeling, Ph.D. Thesis, Chalmers University of Technology, 2004.

Talks

- [1] A. LOGG. Mechlab, Nordic Computational Differential Equations Circus, Chalmers Göteborg, 1998.
- [2] A. LOGG. A Multi-Adaptive ODE-Solver, Nordic Computational Differential Equations Circus, Helsinki, 1999.
- [3] A. LOGG. Multiadaptivity in Pictures, Nordic Computational Differential Equations Circus, Bergen, 2000.
- [4] A. LOGG. Strategies for Multi-Adaptive Time-Stepping, Finite Element Center Workshop, Chalmers Göteborg, 2000.
- [5] A. LOGG. Higher-Order Elements and the Lorenz System, Nordic Computational Differential Equations Circus, Tampere, 2001.
- [6] A. LOGG. Computability of the Lorenz System and the Solar System, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2001.
- [7] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs, Licentiate Seminar, Chalmers Göteborg, 2001.
- [8] A. LOGG. Multi-Adaptive Galerkin Methods for ODEs, International Conference on Scientific Computation and Differential Equations (SciCADE 2001), Vancouver, 2001.
- [9] A. LOGG, J. HOFFMAN AND C. JOHNSON. On the Computability of the Incompressible Navier-Stokes Equations, AMFLOW, Heidelberg, 2001.
- [10] A. LOGG. Beräkningsmatematik, Birger Sjöberggymnasiet, Vänersborg, 2001.
- [11] C. JOHNSON, J. HOFFMAN AND A. LOGG. Two Topics in Adaptivity, Congreso de Ecuaciones Diferenciales y Aplicaciones (CEDYA 2001), Salamanca, 2001.
- [12] A. LOGG. Beräkningsmatematik, Burgårdsgymnasiet, Göteborg, 2002.
- [13] J. HOFFMAN AND A. LOGG. Dynamic Object-Oriented Library for FINite Element Computation, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2002.
- [14] A. LOGG, K. ERIKSSON AND C. JOHNSON. Explicit Time-Stepping for Stiff ODEs, Finite Element Center Workshop, Chalmers Göteborg, 2002.
- [15] A. LOGG, K. ERIKSSON AND C. JOHNSON. Explicit Time-Stepping for Stiff ODEs, Third China-Sweden Workshop on Computational Mathematics, Chalmers Göteborg, 2002.
- [16] A. LOGG. Matematisk Modellering Och Beräkning, Centre of Chemical Process Engineering (CPE), Chalmers Göteborg, 2002.
- [17] A. LOGG. A Priori Error Analysis of Multi-Adaptive Galerkin Methods, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2002.
- [18] A. LOGG. Matematisk Modellering Och Beräkning, Chalmers Day, Chalmers Göteborg, 2002.
- [19] A. LOGG, K. ERIKSSON AND C. JOHNSON. Multi-Adaptive Time Integration, Innovative Time Integrators for PDEs Workshop (IIPDE 2002), CWI Amsterdam, 2002.
- [20] A. LOGG. Computational Mathematical Modelling, Seminar, Chalmers Göteborg, 2002.
- [21] C. JOHNSON, J. HOFFMAN AND A. LOGG. The DOLFIN Project - a Platform for Finite Element Computation, Isaac Newton Institute, Cambridge, 2003.
- [22] A. LOGG. Adaptive Explicit Time-Stepping for Stiff ODEs, First European Finite Element Fair, Cambridge, 2003.

- [23] A. LOGG, K. ERIKSSON AND C. JOHNSON. Explicit Time-Stepping for Stiff ODEs, CWI Seminar, CWI Amsterdam, 2003.
- [24] A. LOGG. Current Status of DOLFIN - a Guide for Prospective Developers, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2003.
- [25] A. LOGG. Time Integration of ODEs and PDEs With Multi-Adaptive Galerkin Methods, First International Conference on Adaptive Modelling Simulation (ADMOS 2003), Chalmers Göteborg, 2003.
- [26] A. LOGG. A General Adaptive Finite Element Solver With Application to Turbulent Reactive Flow, New Era for Chemical Reactors Workshop, Chalmers Göteborg, 2003.
- [27] A. LOGG. Automation of Computational Mathematical Modeling: the FEniCS Project, TTI Seminar, Chicago, 2003.
- [28] A. LOGG. Automation of Computational Mathematical Modeling, Ph.D. Seminar, Chalmers Göteborg, 2004.
- [29] A. LOGG. Automation of Computational Mathematical Modeling, TTI Seminar, Chicago, 2004.
- [30] A. LOGG. Automation of Computational Mathematical Modeling, University of Chicago Graduate Seminar, Chicago, 2004.
- [31] A. LOGG. A Compiler for Variational Forms, TTI Seminar, Chicago, 2004.
- [32] A. LOGG. A Compiler for Variational Forms, KTH/NADA, Stockholm, 2004.
- [33] A. LOGG. A Compiler for Variational Forms, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2004.
- [34] A. LOGG. FFC: a Compiler for Variational Forms, SIAM Conference on Computational Science and Engineering (SIAM CSE 2005), Orlando, 2005.
- [35] A. LOGG. Benchmark Results for the FEniCS Form Compiler, TTI Seminar, Chicago, 2005.
- [36] A. LOGG. Automating the Finite Element Method, Computational and Applied Mathematics Seminar, Chalmers Göteborg, 2005.
- [37] A. LOGG. Automating the Finite Element Method, KTH/NADA, Stockholm, 2005.
- [38] A. LOGG. Automating the Finite Element Method, Simula Research Laboratory, Oslo, 2005.
- [39] A. LOGG. A New Family of Methods for Global Error Control in ODE Solvers, Simula Research Laboratory, Oslo, 2005.
- [40] A. LOGG. How to Solve Differential Equations and How to Automate It, TTI Student Seminar, Chicago, 2005.
- [41] A. LOGG. Extending and Optimizing the FEniCS Form Compiler, FEniCS'05 Workshop, Chicago, 2005.
- [42] A. LOGG. How Large Is the Error?, TTI Seminar, Chicago, 2005.
- [43] A. LOGG. Automating the Finite Element Method, Lecture series at the Sixth Winter School in Computational Mathematics, Geilo, 2006.
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