

# Barbara Wohlmuth

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## ***Current position***

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Full Professor of Applied Mathematics, University of Stuttgart

## ***Education***

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Matrise in Mathematics, Universite de Joseph Fourier, Grenoble, 1991  
Diploma in Mathematics, Technische Universität München, 1992  
Ph.D., Technische Universität München, 1995  
Habilitation, Universität Augsburg, 2000

## ***Research interests***

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Finite elements, domain decomposition methods  
Nonlinear computational mechanics, multifield problems, contact problems  
Iterative solvers (Multigrid and FETI)  
Error estimation and adaptivity  
Methods for modelling of systems with uncertain parameters

## ***Career***

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Full Professor of Applied Mathematics, Universität Stuttgart, since 2001  
Visiting Professor, Universite de Valenciennes et du Hainaut Cambresis, France (four weeks), 2004  
Visiting Professor, Universite de Pau et des Pays de l'Adour, Pau, France (four weeks), 2003  
Visiting Scientist, Universite Pierre et Marie Curie, Paris (three months), 2001  
Visiting Scientist, Courant Institute of Mathematical Sciences, New York University, 1997-1998  
Research Assistant, Universität Augsburg, 1995-2001  
Scientific Employee, Bavarian Research Group for High Performance Comp. (FORTWIHR), 1993-1995

## ***Honors and awards***

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Sacchi-Landriani Prize, Instituto Lombardo, Accademia di Scienze e Lettere, Mailand, 2005  
DFG-Fellowship (Habilitationstipendium), 1997-1998  
Fellowship "Studienstiftung des deutschen Volkes", 1989  
Stipend for studies abroad, "Studienstiftung des deutschen Volkes" 1990-1991

## ***Professional activities***

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Reviewer with national and international Journals  
Women's rights representative of the department of Mathematics and Physics, 2002-2004  
Member of the faculty board, since 2002  
Member of the advisory board of student affairs (Studienkommission), 2002-2004  
Chair of the SFB 404: Multifield problems of Continuum Mechanics, since 2005

## ***Summary of journal publications***

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<b>Journal</b>	<b>Impact factor</b>	<b>Number of papers</b>
SIAM Journal of Numerical Analysis	1.437	8
Computer Methods in Applied Mechanics and Engineering	1.252	3
Other indexed journals		42
Other papers in refereed journals		14

### ***Selected publications (max. 5)***

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Djoko, J., Lamichhane, B., Reddy, D., Wohlmuth, B., "Conditions for equivalence between the Hu-Washizu and related formulations, and computational behavior in the incompressible limit", *Computer Methods in Applied Mechanics and Engineering*, to appear

Hüeber, S., Wohlmuth, B., "A primal-dual active set strategy for non-linear multibody contact problems", *Computer Methods in Applied Mechanics and Engineering*, doi:10.1016/j.cma.2004.08.006 9

Luce, R., Wohlmuth, B., "A local a posteriori error estimator based on equilibrated fluxes", *SIAM J. Numer. Anal.*, 42, 1394-1414, 2004

Wohlmuth, B., "Discretization Techniques and Iterative Solvers Based on Domain Decomposition", *Lectures Notes in Computational Science and Engineering*, Vol 17, Springer Verlag, Heidelberg, 2001

Wohlmuth, B., "A mortar finite element method using dual spaces for the Lagrange multiplier", *SIAM J. Numer. Anal.* 38, 989-1012, 2000