

CURRICULUM VITAE

Rolf Stenberg
Professor emeritus
Institute of Mathematics and Systems Analysis
Aalto University – School of Science
November 6, 2025

Personal data

Born 22.11.1953, Helsinki

Education

Master of Science 1980 ("with distinction")

Licentiate of Technology 1981

Doctor of Technology 1984

All from the Department of Technical Physics and Mathematics, Helsinki University of Technology (TKK)

Docent in Mathematics, Jyväskylä University 1987–

Languages

Swedish (mother tongue), Finnish (fluent), English (very good), German (good), French (good)

Employments

1978-79	Research engineer, Philips Research and Development Laboratories, Eindhoven, The Netherlands
1980	Lecturer, Department of Mathematics, TKK
1980-83	Research assistant, Academy of Finland
1983-85	Assistant, Department of Mathematics, TKK
1985-86	Acting associate professor in Operations Research and Computer Science, The Swedish School of Economics and Business Administration, Helsinki
1986-90	Junior and senior research fellow, Academy of Finland
1990-92	Senior assistant, Department of Solid Mechanics, TKK
1992-95	Senior research fellow, Academy of Finland
1995-96	Senior assistant, Department of Solid Mechanics, TKK
1996-99	Ordentlicher universitätsprofessor, Numerik und Bauinformatik, Universität Innsbruck, Österreich
1999-2001	Professor of Mathematics, Tampere University of Technology
2001-2021	Professor of Applied Mathematics, TKK–Aalto
2022	Senior advisor. Department of Mathematics and Systems Analysis. Aalto University
2023 –	Emeritus contract. Department of Mathematics and Systems Analysis. Aalto University

Secondary appointments

1975-77	Teaching assistant, Department of Mathematics, TKK
1981-83	Teaching assistant, Department of Mathematics, TKK
1986-87	Teaching assistant, Department of Structural Mechanics, TKK
1987-	Docent in Applied Mathematics, Jyväskylä University
1991	Lecturer, Department of Structural Mechanics, TKK
1990, 1992	Lecturer, The Finnish National Graduate School in Mechanics
1993-2001	Docent in Computational Solid Mechanics, TKK
2005-2006	Head of the language center at TKK

Longer foreign visits

1987-89	Institut National de Recherche en Informatique et en Automatique (INRIA), Roquencourt, France (16 months)
1989	Laboratorio Nacional de Computacao Cientifica, Rio de Janeiro (2 months)
1989	Department of Mathematics, University of Maryland, College Park (4 months)
1992	INRIA-Roquencourt, France (1 month)
1994	Department of Mathematics, University of Maryland, Baltimore County (1 month)
1994	INRIA-Roquencourt, France (6 months)
1998	Département de Mathématiques, Ecole Polytechnique Fédérale de Lausanne (1 month)
2005	Department of Mathematics, University of Pavia (1 month)
2007	Laboratoire Jacques-Louis Lions, Université Pierre et Marie Curie, Paris (1 month)

Research funding and grants

2001	Finnish Academy of Science and Letters, The Väisälä Foundation. 19.000 €.
2002-04	Academy of Finland, project: "Shell equations and FEM – Boundary layers and their approximation". 88.560 €.
2003-06	Academy of Finland, Project: "Foundations of Computational Mechanics". 160.000 €.
2003-06	Member of the EU TRN network: "Smart systems, New materials, Adaptive systems and their nonlinearities. Modelling, Computation and Control". 130.000 €.
2003-05	Member in the project "New Generation of Simulation Methods for Machine System Dynamics" coordinated by the Institute of Mechatronics and Virtual Engineering, Lappeenranta University of Technology and funded by TEKES. 40.000 €.
2005-08	Leader in the project "KOMASI" (Modelling and Simulation of Electro-Mechanical Problems) funded by TEKES. Funding for TKK Mathematics 280.000 €. Total funding for 5 laboratories at TKK and TUT 1.500.000 €.
2006 - 2008	Academy of Finland. 40.000 €.
2007-2008	Academy of Finland. 12 months sabbatical 70.000 €.
2010-13	Broadband and multiscale hybrid finite element boundary integral equation methods for electromagnetics. Joint project with the Department of Radio Science and Engineering, Aalto. Academy of Finland. 339 000 €.
2012-2015	TEKES project "SCARFACE". 111 598 €.
2013	Finnish cultural foundation. 6 months sabbatical 28.000 €.
2016-2017	The Finnish Society of Sciences and Letters. International co-operation 14.900 €.
2016-2017	The Magnus Ehrnrooth Foundation. Travel grant 3.900 €.
2019-2022	The Academy of Finland. "Efficient Finite Element Methods in Continuum Mechanics". 450.000 €
2020	The Magnus Ehrnrooth Foundation. Grant for organising a conference 5.000 €.

Supervision of research

Doctoral thesis

1996	Dominique Chapelle, Dr. Université Pierre et Marie Curie, Paris (co-advisor together with Michel Bernadou, INRIA)
1999	Mikko Lyly, Faculty of Mechanical Engineering, TKK
2007	Petri Jussila, Faculty of Technical Physics and Mathematics, TKK
2007	Jarkko Niiranen, Faculty of Technical Physics and Mathematics, TKK
2008	Simo Hostikka, Faculty of Technical Physics and Mathematics, TKK
2009	Mika Juntunen, Faculty of Technical Physics and Mathematics, TKK
2011	Antti Hannukainen, Aalto-Sci
2011	Juho Könnö, Aalto-Sci
2014	Atte Aalto, Aalto-Sci (Advisor: Dr. Jarmo Malinen)
2015	Antti Huhtala, Aalto-Sci
2018	Tom Gustafsson, Aalto-Sci

Licentiate thesis

1994	Timo Holopainen, Faculty of Mechanical Engineering, TKK
2004	Esko Järvinen, Faculty of Technical Physics and Mathematics, TKK
2006	Antti Lempinen, Faculty of Technical Physics and Mathematics, TKK
2008	Ahti Rahikainen, Faculty of Information and Natural Sciences, TKK
2015	Torsten Malm, Aalto-Sci

Post-doctoral students

1993	Eric Boillat, Département des Mathématiques, Ecole Polytechnique, Lausanne (11 months)
2003	Dominik Schötzau, ETH Zürich (2 months)
2004	Carlo Lovadina, University of Pavia (3 months)
2004-05	Lourenco Beirao da Veiga, University of Pavia (7 months)
2005	Giovanni Formica, University of Calabria (3 months)
2004-06	Marcus Rüter, Universität Hannover (24 months)
2006	Jakub Sulc, Charles University Prague (6 month)
2012-14	John Lee, University of Minnesota (24 months)
2021-2022	Philip Lederer, TU Wien (9 months)

Positions of thrust

- IMACS Technical Committee on Computational Mechanics, 1994–.
- Member of the steering board of the National Graduate School in Engineering Mechanics, 2001–2014.
- Member of the IUTAM General Assembly 2007–2013.
- Member of the Finnish National Committee for Mechanics, 2003–, Vice-Chairman 2004–07, Secretary 2007–13 Vice-Chairman 2013–.
- Member of the Swedish Academy of Technology in Finland, 2003–.
- Finnish Society for Computational Science, Vice President 2010, President 2011–2013.
- Member of The Finnish Society of Sciences and Letters, 2011–.
- Member of the board for the BIT foudation, 2022–

Duties as scientific expert

- SIAM Journal of Numerical Analysis, member of the editorial board 2002–2008.
- Rakenteiden Mekaniikka–Journal of Structural Mechanics, member of the editorial board 1994–
- ISRN Mathematical Analysis, member of the editorial board 2010–2014.
- BIT Numerical Mathematics, member of the editorial board 2011–
- Mathematical Problems in Engineering, member of the editorial board 2012–2015
- Asia-Pacific Journal of Computational Engineering, member of the editorial board 2012–2017
- Reviewer for Mathematical Reviews 2006–.
- Reviewer for Internationale Mathematische Nachrichten 1997–2005.
- Referee for the following foreign agencies: National Science Foundations, USA 1993-1999 & 2003, Fonds National Suisse de la Recherche Scientifique 1999 & 2005, European Science Foundation 2000 & 2009, Dutch Science Foundation 2002, Israel Science Foundation 2003. Deutsche Forschungsgemeinschaft 2005, Superior Council of the National Fund for Scientific & Technological Development, Greece 2007, National Commission for Scientific and Technological Research, Chile 2009 & 2010, University of Cyprus 2009, Agence Nationale de la Recherche, France, 2011, The Swedish Research Council 2012, Italian Agency for the Evaluation of Universities and Research Institutes 2012, The Austrian Science Foundation 2021, Kungliga Vetenskapsakademin 2022.
- Acted as opponent/member of the jury at the defence of 14 doctoral dissertations (Lyon, 2×Paris, Zürich, 3×Innsbruck, Helsinki, Oslo, Concepcion, 2×Jyväskylä, Gothenburg, Vienna).
- Referee for 22 doctoral dissertations.
- External expert for 12 docents (adjoint professorships/habilitation de diriger de recherche) in Applied Mathematics
- External expert for 13 professorships in Applied Mathematics (Oslo, Lappeenranta, Innsbruck, Tampere, Basel, Lausanne, Jyväskylä, Rutgers, Gothenburg, Mumbai, Peking, Gothenburg, Sussex).
- Member of the steering board for the ELMER Finite Element project at the Centre for Scientific Computing Ltd. (Finland), 1995–96, 1999–. Chairman 2013–.
- Member of the scientific board of the French research program "Modeling and Numerical Simulation for Nuclear Waste Management Problems," 2010–2013.
- Member of the scientific board of the Magnus Ehrnrooth foundation, 2015–2017.
- Referee for several international journals.
- Member of the organising or scientific committees for several international conferences.
- Invited minicourses: Lyon 1989, Rio de Janeiro 1989, Pavia 2004, CISM Udine 2005, Sevilla 2009.
- 54 invited talks at international conferences and 48 talks at foreign universities.

Awards

The Lorenz Lindelöf Price in Mathematics by the Finnish Society of Sciences and Letters 2019.

Publications

162 Publications:

- 95 Peer-reviewed scientific articles
- 46 Non-refereed scientific articles
- 7 Scientific books
- 10 Publications intended for professional communities
- 4 Publications for the general public

Citations: [Google Scholar](#): 6242, h-index: 41. [MatSciNet](#): 2486., index: 26