

CURRICULUM VITAE
of
ROLF JELTSCH
Professor Seminar for Applied Mathematics
ETH Zürich, Switzerland

Born 31 October 1945 in Zürich;
Married to Marianne Grauer 1970;
Children: Veronika 1972, Rita 1974, Urs 1978, Claudia 1983;

Diploma in mathematics 1969 at ETH Zürich;
Degree as a high school teacher in mathematics 1970 at ETH Zürich;
Ph.D. in mathematics 1972 at ETH Zürich;

Positions

1972-73 Killam postdoctoral fellow Dalhousie U, Canada;
1973-75 adj. ass. prof. University of California Los Angeles, UCLA, US;
1975-76 ass. prof. University of Kentucky, US;
1976-77 docent, Ruhr University in Bochum, Germany;
1977-79 associate prof. Ruhr University in Bochum, Germany;
1979-89 full prof. in Mathematics and Director of the Institute for Geometry
and Practical Mathematics of the University of Technology RWTH Aachen,
Germany;
1989-2011 full professor at ETH Zürich, Switzerland
1991-1993 Chair of the Department of Mathematics

Extended visits

1978 Stanford University, US, 6 month, fellowship of the Swiss National Science
Foundation
1978 Helsinki Univ. of Technology, Finland, 2 month, fellowship of the Swiss
National Science Foundation
1981 Helsinki Univ. of Technology, Finland, 3 weeks
1985 Helsinki Univ. of Technology, Finland, 1 month
1985 Stanford University, US, 1 month
1990 Helsinki Univ. of Technology, Finland, 2 month

1998-99 University of Queensland, Brisbane, Australia, 6 month
2004 The University of Auckland, Auckland, New Zealand, 2 month
2004-2005 University of Chile, Santiago de Chile, Chile, 2 month
2005 Escuela Politecnica Nacional, Quito, Ecuador, 1 month
2011 CMAF Centro de Matematica e Aplicaes Fundamentais, University of Lisbon, Portugal, 6 month, research fellowship of the Fundacao para a Ciencia e a Tecnologia, Portugal
2011 Visiting Professor at the University of Southern Denmark, 1.5 month
2012 Visiting Professor at the University of Southern Denmark, 2.5 month

Honours

Fellow of the National Mathematical, Centre, Abuja, Nigeria, Meritorious Service Award, 27 July, 2000
Foreign member of the Finnish Academy of Science and Letters, Finland, 15 April 2002
Honorary degree of the North University of Baia Mare, Romania, 10 October 2002
Honorary degree of the University of Technology Helsinki, 2 April 2008
Honorary degree of the Vietnamese Academy of Science and Technology, 26 November 2010

Involvement in societies:

ICIAM International Council for Industrial and Applied Mathematics

2000- 2005 Representative of EMS, voting member
2000- 2007 Representative of SMG, non-voting member
2001- 2007 Congress Director of ICIAM 2007 held in Zürich, 16 - 20 July, 3200 participants
2005- 2007 President-Elect
2007- present President

EMS European Mathematical Society

1994-2004 Council member
1994-1998 Member of the electronic publishing committee
1997-1998 Member of the executive committee
1998-2009 Member of the applied mathematics committee

1999-2002 President

2004-2006 Committee on meetings

2001-2002 President of the board of trustees of the European Mathematical Foundation

2002 - present Member of the board of trustees of the European Mathematical Foundation

2010 - present Delegate of the Individual Members of the EMS

GAMM Society for Applied Mathematics and Mechanics

1996-2001 Member of the Executive Board

2005-2007 President

2006-2008 Chair of the Richard-von-Mises Prize committee

2008-2010 Vicepresident

2008-2010 Chair of the election committee

2008-2010 Chair of the committee future

2011-2013 Member of the election committee

SMS Societe Mathematiques Suisse

1998-1999 Secretary

2000-2001 Vicepresident

2002-2003 President

2004 - present Advisory Board

Leonhard Euler Center (Swiss Pilot Center of the **E**uropean **C**ommunity of **F**low **T**urbulence and **C**ombustion ERCOFTAC)

1995-96 Vicepresident

1997-98 President

MACSI-net (European network on Mathematics Application, Computing and Simulation in Industry)

2000-2004 Member of the strategy board

IMU International Mathematical Union

1998 - Member of the General Assembly representing Switzerland

2002-2006 Member of Committee for Electronic Information and Communication, DMathLib co-chair

Member of the Prize Committee for the 2010 Gauss Prize

OECD Global Science Forum

2006 - 2008 Member of the steering committee for the project Workshops on 'Mathematics in Industry'

2006 - 2011 Representative of Switzerland in the activity concerning projects related to 'Mathematics in Industry'

ICMI - ICIAM Study 'Educational Interfaces between Mathematics and Industry'

2008 - present Member of the International Program Committee

Organisation of major conferences:

Organization together with Prof. Ballmann of the 'Second International Conference on Hyperbolic Problems, Theory, numerical methods and applications', Aachen, March 14-18, 1988.

Organization of the 'Seventh International Conference on Hyperbolic Problems, Theory, numerical methods and applications', ETH Zürich, February 9-13, 1998.

Organization together with L. Kleiser and M. Gutknecht, Annual meeting of GAMM, ETH Zürich, February 12-15, 2001

Conference Chair, jointly with G. Strang (president SIAM) and P. Deuffhard (local organizer) of the first EMS-SIAM conference. Title: 'Applied Mathematics in a Changing World' Berlin, 2-6 September 2001

Conference Chair, jointly with M. Thera (president SMAI) and M. Waldschmidt (president SMF) of a EMS-SMAI-SMF conference. Title: 'Applied mathematics - Application of mathematics' Nice 10-13 February 2003

Congress Director of ICIAM 2007, Zurich, 16-20 July 2007.

Organization together with T. Roesgen and M. Gutknecht, Annual meeting of GAMM, ETH Zürich, 16-20 July 2007.

Research Interests: Numerical Analysis (from theoretical investigations to engineering applications,) parallel computing, computational sciences. Special field of interests are numerics of hyperbolic conservation laws with applications in Euler equations of gas dynamics, compressible Navier-Stokes including large Eddy Simulation (LES) and chemistry, shallow water equations, magneto-hydrodynamical equations (MHD). Large scale computational and engineering problems such as simulation of accelerator beams, climate modeling, optimizing three dimensional turbine blades, modeling circuit breakers

Publications

42 Publications in refereed scientific Journals
40 Publications in Proceedings
10 Books edited
35 Articles in other none scientific Publications

Editorial Boards

Journal of Computational and Applied Mathematics: Associate Editor, 1981 - 2000

Book series: Numerical Mathematics and Scientific Computation, Oxford University Press: Editor, 1995 - 2001.

Journal on Computing and Visualization in Science, Springer: Associate Editor, since 1998.

SIAM Computational Science and Engineering Book Series: Member of the Editorial Board, 2004-2009.

Proceedings A of the Royal Society : 2004 -2009

Teaching

Ph.D. students: 37

CSE Curriculum: Together with colleagues I have introduced in 1997 a new curriculum at ETH called: Computational Sciences and Engineering.
1997- 2008 Head of Student Studies CSE
For more information: <http://www.rw.ethz.ch>.

Member of Advisory Boards

Banach Center, Warsaw, Poland, Chair of the Scientific Council 2002-2005

Simula Research Center, Lysaker, Norway, 2002-2005

Johann Radon Institute for Computational and Applied Mathematics (RICAM), Linz, Austria 2003- present

PSCI - Parallel and Scientific Computing Institute, Royal Institute of Technology, Stockholm and University of Uppsala, Sweden, 1999-2003

CIAM Center for Industrial and Applied Mathematics, Royal Institute of Technology, Stockholm, Sweden, 2007 - present

CIM Centro International de Matemática, Scientific Council, 2009 - present

Evaluations

Site visit of the Nigerian Mathematical Center in Abuja, 28 August - 2 September 1994. The visit was made for the Academy of Sciences for the Developing World, TWAS, to review the possibility to make NMC to a Center of Excellence. The visit was done jointly with Michiel Hazewinkel.

Site committee University of Hawaii, Manoa, 10 -12 October 2001. This visit was made for the National Science Foundation of US. Chair of the site visiting team.

Imperial College London, Review of Undergraduate Teaching, 27 February 2004
Stuttgart Computing Center, chair

6th FP Marie Curie Call FP6-2002-Mobility-1

6th FP NEST Scientific Panel for New and Emerging Science and Technology (NEST) individual assessments of proposals and panel member allways panel member the last one chair of panel

-perform individual assessments of proposals remotely (i.e. from your own place of work) in the period 20th November to 4th December 2003 (stage A), and 3rd to 17th May 2004 (stage B) and to join the NEST scientific panel meeting in Brussels on 12th to 14th January 2004 (stage A), and 2nd to 3rd June 2004 (stage B), who will be responsible for the final assessment of proposals. remotely (i.e. from your own place of work) in the period 20th November to 4th December 2003 (stage A), and 3rd to 17th May 2004 (stage B),

VSNU Evaluation of the Mathematics in the Netherlands, 24 -29 August 2003

Review panel of the Helmholtz Programme concerning *Scientific Computing* applications by Forschungszentrum Jülich (FZJ) and Forschungszentrum Karlsruhe (FZK) in Jülich, 5 May 2004

Modellierung Simulation am 26./27.10.06. Landesstiftung Baden-Württemberg, 2004 - 2006

Panel for Engineering Sciences of the Swedish Research Council for evaluating Linnaeus Grants, supporting strong research environments at Swedish Universities. 2007 - 2008

Programm 'High Performance Computing'. Landesstiftung Baden-Württemberg, 2009 - present

Team to evaluate MFO, Mathematisches Forschungsinstitut Oberwolfach. Leibniz Association, 2009

European Research Council, ERC Advanced Grant (Physical Sciences & Engineering) Chair of the Panel PE1 - Mathematical foundations: all areas of mathematics, pure and applied, plus mathematical foundations of computer

science, mathematical physics and statistics. Years 2009, 2011, 2013
Panel member of Quality and Renewal 2011 research evaluation of Uppsala University, Uppsala, Sweden

Zürich, February 2011