



Dr. Róbert Horváth

Scientific CV / Szakmai önéletrajz

Education

1989-1994, Eötvös Loránd University, Budapest, Hungary (Mathematics, Physics, Descriptive geometry)

1994-1997, PhD School at Eötvös Loránd University, Budapest, Applied Mathematics. 2000, PhD dissertation is submitted with the title "Qualitative Properties of Numerical Solutions of the Heat Conduction Equation".

2001, PhD degree in Mathematics.

2009, habilitation, Eötvös Loránd University, Budapest, Hungary

Work history

1993-2002, University of West Hungary, Institute of Mathematics, Faculty of Forestry, Sopron, Hungary,

2000-2002, University of Technology Eindhoven, Philips Research Laboratories Eindhoven, Eindhoven, The Netherlands,

2002-2012, University of West Hungary, Faculty of Economics, Sopron, Hungary.

2008-, Budapest University of Technology and Economics, Budapest, Faculty of Natural Sciences, Department of Analysis, Hungary.

2012-, MTA-ELTE Numerical Methods and Large Networks Research Group.

Languages

Hungarian (native language), German, English, Dutch.

Teaching experience

1993-2012, University of West Hungary (Sopron) -- Analysis, Linear Algebra, Operations Research, Numerical Mathematics, Mathematical Statistics, Probability Theory, Financial Option Valuation),

1997, Eötvös Loránd University (Budapest) -- Analysis

2004, Eötvös Loránd University (Budapest) -- PhD course (Numerical Solution of Partial Differential Equations).

2004, Eötvös Loránd University (Budapest) -- Numerical modelling.

2008-, Budapest University of Technology and Economics (Budapest) -- Numerical Methods, numerical computations, analysis.

My students

2008- BSc and MSc students: Klára Barta, Richárd Bene, Alexandra Csikós, Gergely Csomós, Tamás Cziráki, Adél Deichler, Aletta Géczi, Gábor Janecskó,

Ivett Láda, Dániel Semler, Tünde Szász (BSc), Balázs Poronyi, Bálint Máté Takács (MSc)

2008- PhD students: Annamária Bischof, Jean-Paul André (absolutorium)

My students' prizes

2005, Csaba Péterfalvi (Eötvös Loránd University, physicist), lauded at OTDK.

2017, Bálint Máté Takács (Eötvös Loránd University, Faculty of Natural Sciences, mathematician, MSc), Outstanding student of the faculty.

2017, Bálint Máté Takács (Eötvös Loránd University, Faculty of Natural Sciences, mathematician, MSc), special prize at XXXIII. OTDK conference

2017, Bálint Máté Takács (Eötvös Loránd University, Faculty of Natural Sciences, mathematician, PhD), ÚNKP-17-3 New National Excellence Program of the Ministry of Human Capacities

Scientific Publications

See my publication page.

Scientific Awards

2004, Gyula Farkas Award (from János Bolyai Mathematical Society)

2007, János Bolyai Research Fellowship (from Hungarian Academy of Sciences)

2007, Outstanding teacher of the faculty (NYME KTK)

2015, Outstanding teacher of the faculty (BME TTK)

Refereeing Work

Acta Geodaetica et Geophysica Hungarica

American Journal of Numerical Analysis

Applications of Mathematics

Applied Mathematical Modelling

Computers and Mathematics with Applications

International Journal of Computational Science and Engineering (IJCSE)

International Journal of Numerical Analysis and Modeling (IJNAM)

Journal of Computational and Applied Mathematics

Mathematical and Computer Modelling

PhD

2015, Balázs Kovács (ELTE), Efficient numerical methods for elliptic and parabolic partial differential equations, supervisor: János Karátson

Projects

2006-2011, OTKA 61800 Modern mathematical methods in Geodesy (GGKI, SOPRON)

2007-2013, OTKA 67819, Numerical solutions of nonlinear time-dependent problems and their qualitative investigation (ELTE)

2008-2012, Ányos Jedlik project, Modelling of fuel-cells (ELTE, Recommend, STS Group)

2009, TÁMOP-4.1.2-08/2/A/KMR-2009-0027 (BME)

2011, TÁMOP-4.1.2.A/1-11/0064 (BME)

2011, TÁMOP-4.1.2.A/1-2011-0025 (ELTE, Szeged, Debrecen, Pécs)

2014-2018, OTKA 112157, Numerical solution of partial differential equations and their qualitative investigation

Membership of organizing / scientific committees

1996, László Rátz Assembly (for teachers of mathematics), Sopron, Hungary

2002, Finite-Difference Time-Domain Meeting, Philips Research Laboratories, Eindhoven, the Netherlands

2015, The Second Basque-Hungarian Workshop on Numerical Methods for PDEs, Basque Center for Applied Mathematics (BCAM), Bilbao, Spain, 12-13 January, 2015. (Member of the scientific committee.)

2017, Bergen-Budapest Workshop on "Qualitative and Numerical Aspects of Mathematical Modelling", Western Norway University of Applied Sciences, Bergen, Norway May 29-30, 2017. (Member of the scientific committee.)

2018, ECMI 2018, Budapest, Hungary, 18-22 June, 2018. (Organizer of the minisymposium "Qualitative properties of ordinary and partial differential equations and their numerical solutions".)

Organization of conferences and workshops

1996, László Rátz Roving Conference for teachers of mathematics, Sopron, Hungary

2002, Finite Difference Time-Domain Meeting, Philips Research Laboratories, Eindhoven, the Netherlands

2015, The Second Basque-Hungarian Workshop on Numerical Methods for PDEs, Basque Center for Applied Mathematics (BCAM), Bilbao, Spain, 12-13. January, 2015. (Member of the scientific committee.)

2017, Bergen-Budapest Workshop on "Qualitative and Numerical Aspects of Mathematical Modelling", Western Norway University of Applied Sciences, Bergen, Norway May 29-30, 2017. (Member of the scientific committee.)

2018, ECMI 2018, Budapest, Hungary, 18-22 June, 2018. (Organizer of the minisymposium "Qualitative properties of ordinary and partial differential equations and their numerical solutions".)

International Conferences and Visits

- SEFI Annual Conference - Visions and Strategies for Europe, Czech Republik (Prague, 1994)

- 6th International Conference on Numerical Methods, Hungary (Miskolc, 1994)

- School on Numerical Simulation of PDE's: Methods, algorithms, applications, Italy (Trieste, 1996)

- Second Joint Conference on Mathematics and Computer Science, Romania (Illyefalva, 1997)

- Conference on Numerical Methods and Computational Mechanics, Hungary (Miskolc, 1998)

- Conference in Honor of Robert J. Plemmons, USA (Winston-Salem, 1999)

- Third Joint Conference on Mathematics and Computer Science, Hungary (Visegrád, 1999)

- The Third European Conference on Mathematics and Advanced Applications, Finland (Jyväskylä, 1999)

- Conference on 3D Finite Element Methods, Finland (Jyväskylä, 2000)
- NUMDIFF-9, Germany (Halle an der Saale, 2000)
- IEEE Workshop on Signal Propagation on Interconnects, Italy (Venice-Cavallino, 2001)
- Scientific Computing in Electrical Engineering Conference, The Netherlands (Eindhoven, 2002)
- ENUMATH-2003, Czech Republic (Prague, 2003)
- NUMDIFF-10, Germany, (Halle an der Saale, 2003)
- ECMI conference, The Netherlands (Eindhoven, 2004)
- Large-Scale Scientific Computations, Bulgaria (Sozopol, 2005)
- Quantitative and Mathematical Finance Conference (Budapest, 2005)
- UKRPROG'2006, Ukraine (Kiev, 2006)
- 6th International Conference on Numerical Methods and Applications (NM&A'06), Bulgaria (Borovets, 2006)
- 4th Conference on Finite Difference Methods: Theory and Applications, Bulgaria (Lozenetz, 2006)
- NUMDIFF-11, Germany, (Halle an der Saale, 2006)
- Encounters between discrete and continuous mathematics, Germany (Blaubeuren, 2008)
- Conference on Numerical Analysis and Applications (NAA'08), Bulgaria (Lozenetz, 2008)
- NUMDIFF-12, Germany, (Halle an der Saale, 2009)
- 61st Annual Meeting of the International Society of Electrochemistry konferencia. A kiállított poszter címe "Parameter estimation in a PEMFC model", France (Nice, 2010).
- Innovative integrators Workshop, Austria (Innsbruck, 2010).
- Conference on Simulation and Optimization, Hungary (Győr, 2011).
- Basque-Hungarian Workshop on Numerical Methods for Large Systems, Basque Center for Applied Mathematics (BCAM), Bilbao, Spain, April 2012.
- Encounters Between Discrete and Continuous Mathematics Workshop on Dynamical Networks, Numerical Analysis and Ergodic Theory, Budapest, ELTE, 21-24. May, 2013.
- The Third BCAM Workshop in Computational Mathematics, Basque Center for Applied Mathematics (BCAM), Bilbao, Spain, 17-18. July, 2014.
- The Second Basque-Hungarian Workshop on Numerical Methods for PDEs, Basque Center for Applied Mathematics (BCAM), Bilbao, Spain, 12-13. January, 2015. (Member of the scientific committee.)
- Bergen-Budapest Workshop on "Qualitative and Numerical Aspects of Mathematical Modelling", Western Norway University of Applied Sciences, Bergen, Norway May 29-30, 2017. (Member of the scientific committee.)
- ECMI 2018, Budapest, Hungary, 18-22 June, 2018. (Organizer of the minisymposium "Qualitative properties of ordinary and partial differential equations and their numerical solutions".)