Curriculum Vitae: Mohammad Asadzadeh

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Professional preparation

B.Sc. in Mathematics, Kharazmi (Tarbiat Moallem) University of Tehran, 1973. Ph.D. in Mathematics, The University of Göteborg, Sweden, 1986.

Thesis: "Convergence analysis of some numerical methods for neutron transport and Vlasov equations". Supervisor: Claes Johnson.

Professional experience

Department of Science and Education of Iran, Shoushtar:

• Lecturer of Mathematics and Physics (high school/college), 1973-1975.

National Industrial Education Center of Iran, Kashan University of Tech:

• Lecturer of Mathematics (undergraduate engineering), 1975-1977.

Chalmers University of Technology:

- Assistant of Mathematics, 1978-1986.
- Assistant Professor, 1986-1995 (on leave 93-95 visiting UM)

University of Michigan, Ann Arbor:

• Visiting Assistant Professor of Mathematics, 1993-1995.

Chalmers University of Technology:

- Senior Lecturer of Mathematics, 1993-2001.
- Associate Professor of Mathematics (Docent), 2001–2011 (on leave 2007 visiting Cornell).

Cornell University:

• Visiting Professor of Mathematics, 2007.

Chalmers University of Technology:

- Professor of Applied Mathematics, 2012–2018. Swedish: bitr. Prof.
- Professor of Applied Mathematics, 2018–present.

Fellowship and research grants

Research scholar grant, 1984; University of Michigan, Ann Arbor, USA.

EU/INTAS research project grant, 2005-2006; "On Synthetic Optimal Control": Coordinator for Azerbaijan, Sweden, Turkey and Ukraine.

JSPS (Japan's Society for the Promotion of Science) grant, 2009:

Numerical analysis of BGK equation. Kyoto University, Aerospace engineering.

RAYsearch grant 2011: Finite elements for radiation oncology; Head screening.

Swedish Research Council (VR) grants,

- Project: 2010-2013, Numerical methods for neutron transport equation
- Joint project: 2013-2017, DREAM (Deterministic REActor Modelling). with applied physics, mechanics and Fraunhofer Institutes at Chalmers.

Awards

Riaazi Kermani award 2013: For the "best paper" in *The 43th Annual Iranian Mathematical Conference for academic year 2011-2012.*

Master students

I have supervised over a dozen of master thesis at Dept of Math, Chalmers. and 2 at Institute of Advance Studies in Basic Sciences (IASBS), Zanjan, Iran.

Research students

Abdelouahab Kadem, PhD Applied Mathematics, 2006. (Chalmers)/Setif U. Spectral methods for the neutron transport equation.

Hassan Almanasreh, PhD Applied Mathematics, 2012. GU/Chalmers. The Dirac Equation: Numerical and Asymptotic Analysis.

Ehsan Kazemi, PhD Applied Mathematics, 2015. (Chalmers)/Isfahan U of Tech The Streamline Diffusion and Discontinuous Galerkin Methods for Linearized Boltzmann Equation

John Bondestam Malmberg; PhD Applied Mathematics, 2017 (co-adviser). GU. Efficient Adaptive Algorithms for an Electromagnetic Coefficient Inverse Problem.

Christoffer Standar; PhD Applied Mathematics, 2017. Chalmers.

On finite element schemes for Vlasov-Maxwell system and Shrödinger equation.

Current graduate student: Niklas Eriksson; Department of Mathematics, GU. On finite element approximations for Stokes and Navier-Stokes equations.

Postdoctoral students

Sebastian Gonzalez Pintor, Spain, 2013-2017.

Tobias Gebäck, Sweden, 2010-2012.

Laurent Thevenot, France, 2003.

Piotr Kowalczyk, Poland, 2002.

Alexandros Sopasakis, USA, 2000-2002.

Editorial

- Editorial board: Applied and Computational Mathematics, 2002-
- Associate editor: Bulletin of Iranian Mathematical Society, 2003-
- Editorial board: Computational Methods for Differential Equations, 2012-
- Associate editor: Iranian Journal of Science and Technology, 2016-

Administration

- Member of the Library board at Math department, Chalmers, 1982-2007.
- Vice-chair: Swedish University Teachers Assoc. (SULF), Chalmers 1999-2012
- Board member: Swedish Academicians Organization (SACO), Chalmers 2005-
- Member of the coordinating board, mathematical sciences, Chalmers 2005-
- Member of Project NT5, QA; Quality assurance of Master programs in 5 Nordic University of Technologies: Aalto (Helsinki), Chalmers (Göteborg), DTU (Copenhagen), KTH(Stockholm) and NTNU(Trondheim); 2009-2012.
- Member of the SAC (Swedish Alumni Club) of JSPS, 2015-
- Chairman of the Swedish University Teachers Association at Chalmers, 2018/2019.

Books

- M. Asadzadeh, Analys och linjär algebra, Studentlitteratur,
 - Upplaga 1, 2004, pp. 399, ISBN: 91-44-03793-7.
 - Upplaga 2, 2007, pp. 431, ISBN: 9789144005256.
- M. Asadzadeh, An Introduction to Finite Element Method (FEM) for Differential Equations. Wiley (To appear).
- M. Asadzadeh and K. Holmåker, Fourier Analysis and its Applications (in preparation).
- M. Asadzadeh and R. Emanuelsson, Tabeller och Formuler (in preparation).

Lecture Notes

- M. Asadzadeh, PDE Lecture Notes 2001-, ..., -2017 (electronic).
- M. Asadzadeh, Lecture Notes in Fourier analysis 2008 (electronic).
- M. Asadzadeh, An introduction to finite element methods for differential equations, 2006-,..., 2019 (Compendium).
- M. Asadzadeh and F. Bengzon, TMA682, Lecture Notes, 2004 (electronic).
- M. Asadzadeh, Fourier and Wavelet Analysis, Lecture Notes, 2010-2019, (electronic).
- M. Asadzadeh and R. Emanuelsson, Flervariabelanalys (available upon request).

Publications Info and details are given in the list of publications.

Languages known: English, Swedish, French, Persian, Azari.

Membership in Professional Organizations

AMS (American Mathematical Society).

SIAM (Society of Industrial and Applied Mathematics).

Swedish Mathematical Society.

Current research projects: see,

http://www.math.chalmers.se/~mohammad

Community service

I have evaluated a dozen of lecturerships (at assistant/associate professor levels) for Swedish universities, and for few promotions to full professorship in USA. I have served as opponent in applied mathematics and nuclear engineering PhD defenses in Sweden, Norway and France. I have served in about 20 math and engineering PhD committees in Sweden. I have written reviews for math and numerical analysis books and for more than 200 reviews (MathRev) for published papers. I have act as referee for more than 50 math manuscripts submitted to applied math journals.