

Curriculum vitae

January 1st, 2009

Name: Matti Juhani Lassas

Date and place of birth: 1969, Helsinki, Finland.

Citizenship: Finnish

Current position:

Professor of Applied Mathematics at University of Helsinki.

Education and degrees:

Docent of Mathematics at University of Helsinki 1998.

Ph.D. (Mathematics) at University of Helsinki 1996.

Licentiate of philosophy (Mathematics) at University of Helsinki 1992.

Master of science (Mathematics) at University of Helsinki 1992.

Selected academic awards:

Calderón prize of International Inverse Problems Association (IPIA) in 2007¹.

Väisälä prize of Finnish Academy of Science and Letters² for achievements on mathematics in 2004.

Rolf Nevanlinna doctoral thesis award for the best doctoral thesis in mathematics in Finland in 1995³.

Ernst Lindelöf prize for best master thesis in mathematics at University of Helsinki in 1992.

Award for best master thesis in natural sciences at University of Helsinki in 1992.

Fellowships and grants for research:

Academy research fellowship (a 5 year research post of Academy of Finland).
Granted 2002.

Academy postdoctoral fellowship (a 3 year research post of Academy of Finland).

¹See: J. Phys.: Conf. Ser. 124 011002 (1p), 2008: doi: 10.1088/1742-6596/124/1/011002

²<http://www.acadsci.fi/frontpage.htm>

³http://mathstat.helsinki.fi/rni/thesis_award.html

Granted 1998.

Young researcher's grant of University of Helsinki (a 3 year research grant). Granted 1995.

Professional experience:

Academic:

2009–present: Professor of Applied Mathematics at University of Helsinki.

2004–2008: Professor of Mathematics at Helsinki University of Technology.

2002–2004: Academy Research Fellow (a 5 year research post of Academy of Finland).

2001–2002: Researcher in Academy of Finland project “Inverse problems”.

2001: Member of Inverse problems research semester at Mathematical Sciences Research Institute (MSRI) at Berkeley (Aug.-Dec.).

1999–2001: Post doctoral researcher of Academy of Finland.

1998–1999: Visiting scholar at University of Washington (Sep.-June) and a post doctoral fellowship of Academy of Finland.

1996–1998: Young researcher's grant by University of Helsinki.

Collaboration with industry:

2006–2007: Research with PaloDex group to develop dental X-ray tomography.

2005: Research with Kalliotekniikka Consulting Engineers Inc. on vibration measurements in blasting events supervision.

2003–2005: Research with GE Healthcare to develop dental X-ray tomography and mammography. Research was partially funded by Finnish National Technology Agency (Tekes)

2002–2003: Research with Instrumentarium Imaging Inc. to develop medical X-ray imaging. Research was funded by Tekes.

1997: Consulting for Vaisala Inc. Research concerning development of new radar systems.

Editorial duties:

Managing editor of the journal *Inverse Problems and Imaging* published by American Institute of Mathematical Sciences (AIMS).

Experience in scientific project managing:

2005–2008: Responsible researcher of the Helsinki University of Technology

- partner in the project “Inverse problems and reliability of measurements” funded by Finnish National Technology Agency (Tekes).
- 2004–2007: Responsible researcher of the Helsinki University of Technology partner in a project studying 3D X-ray tomography funded by PaloDex Group and Tekes.
- 2002–2005: Leader of project “Inverse problems” funded by Academy of Finland.
- 2000–2004: Leader of project “Geometrical Methods in Anisotropic Inverse Problems.” Project is part of consortium “Anisotropic Inverse Problems with Biomedical Applications” funded by of Academy of Finland.
- 2002–2004: Responsible researcher of the Rolf Nevanlinna Institute partner in the project “Statistical methods in radiology” funded by Tekes, other partners were GE Healthcare, Invers Ltd., Univ. of Kuopio.

Plenary lectures, important invited talks and named lectures:

- 2007: The Calderon prize lecture at Applied Inverse Problems 2007 conference, Vancouver, Canada.
Fabes lectures 2007, Seoul, South Korea.
Research highlights lecture on Inverse Days 2007, Lappeenranta, Finland.
Colloquium lecture of department of Mathematics, University of Washington, USA.
 2×40 minutes invited lectures in the conference “Inverse Problems in Applied Sciences – towards breakthrough”, Hokkaido University, Japan.
- 2006: Plenary lecture at 2nd Finnish-Estonian Mathematical Conference, Tampere, Finland.
Breaking news -lecture at Inverse Days 2006, Tampere, Finland.
- 2005: Plenary lecture at Applied Inverse Problems 2005 conference, Cirencester, UK.
- 2004: Colloquium lecture of the annual meeting of Finnish Mathematical Society, Helsinki.
- 2003: Plenary lecture at Conference on Partial Differential Equations, Inverse Problems and Non-Linear Analysis at the Pan-American Advanced Studies Institute (PASI), Chile.
- In addition to these, 29 other invited talks at scientific conferences and 3 courses at international summer schools.

Ph.D. students supervised:

- Kenrick Bingham, Ph.D. 2005.
Tapio Helin, current Ph.D. student.
Pekka Tietäväinen, current Ph.D. student.
Juha-Matti Perkkiö, current Ph.D. student, co-supervisor Gunther Uhlmann (University of Washington).

Member of boards of scientific societies and institutes:

- 2007–present: Member of Steering and Executive Committees of Inverse Problems International Association (IPIA).
2005–present: Member of Board of Finnish Mathematical Society.
2003–present: Member of Board of Finnish Inverse Problems Society (FIPS).
2002–2003: Member of Board of Rolf Nevanlinna Institute.

Selected memberships of organizing committees of conferences:

- 2008-2009: Member of scientific committee of the conference “Control and inverse problems for PDEs: theoretical and numerical aspects” to be held in Marseilles, France.
Member of program committee of the conference “Applied inverse problems AIP 2009”.
- 2007–2008: Chairman of the local organizing committee of Finnish Mathematical Days 2008 (A biannual conference of Finnish mathematical society).
Co-organizer of conference “Function Spaces, Differential Equations, and Non-linear Analysis 2008.” Helsinki, Finland
- 2004: Member of organizing committee of workshop Perspectives in Inverse Problems, Helsinki, Finland
- 2003: Member of organizing committee of workshop Inverse Spectral Problems, Helsinki, Finland

In addition to these, member of organizing committee of 4 international conferences and mini-symposia.

Other Positions of trust:

- 2006–present: Member of Board and a senior scientist in the Inverse Problems Center of Excellence of the Academy of Finland.
2002–2004: Member of organizing committee of Finnish Mathematical Society theme year 2003–2004 on Inverse Problems.

Other scientific activities:

- 1996: Coaching the Finnish IMO-team (International Mathematics Olympiad).