

**Eero Saksman**  
**CURRICULUM VITAE (January 1, 2019)**

**1. Full Name:**

- Saksman, Eero Antti
- Gender: male

**2. Date and place of birth, nationality, current residence**

- Date and place of birth: February 15, 1962. Kiuruvesi, Finland.
- Citizenship: Finnish.
- Current city of residence: Helsinki.

**3. Education and degrees awarded:**

- Ph.D. (tohtori) in mathematics 1994 (University of Helsinki), M.Sc. (maisteri) in mathematics 1987 (University of Helsinki).
- Docent in mathematics 1995 (matematiikan dosentti) (University of Helsinki).
- Current status: Full Professor (Professori).

**5. Linguistic skills:**

- Mother tongue: Finnish.
- Fluent in English, comfortable with Swedish and German.

**6. Current position:**

- Full Professor at the Department of Mathematics and Statistics, University of Helsinki (01.08.2007 →)

**7. Previous professional appointments:**

- Onsager Professor at NTNU, Trondheim 1/2017 - 6/2017.
- Visiting professor at the Department of Mathematics, Lund University (one month 2015-16).
- (01.08.2012 – 31.08.2013) on sabbatical from teaching (grant of Foundations 'Professor Pool')
- Visiting professor at the Department of Mathematics, Lund University (1/2005–5/2005).
- Full professor, Department of Mathematics and Statistics, University of Jyväskylä (8/2002–7/2007).
- Full professor, Department of Mathematics, Tampere Technical University (1/2001–7/2002).
- Senior Researcher (Sabbatical, varttunut tutkija) of Academy of Finland (8/2006–7/2007).
- Senior Researcher (vanhempi tutkija) of Academy of Finland (1/2000–12/2000).
- Younger Researcher (nuorempi tutkija) of Academy of Finland (8/1995–7/1998).
- Senior assistant (yliassistentti) at the Department of Mathematics, University of Jyväskylä (8/1996–1/1998).
- Assistant (assistentti) at the Department of Mathematics, University of Helsinki (1/1998–12/1999).
- Research assistant (tutkimusassistentti) of Academy of Finland (several periods between 1988–1993).
- Acting assistant (assistentin sijainen) or payed teacher (laskuharjoitusassistentti) at the Department of Mathematics, University of Helsinki (various periods between 1987–1995).

**8. Major research funding and academic leadership, student supervision:**

- Leader of the Academy of Finland Projects:
  - 'Conformiset ja satunnaiset menetelmt analyysissä ja satunnaisgeometriassa.' 1.9.2017–31.8.2021

- (Leader of the group 'Probabilistic methods in Analysis' in) Center of Excellence 'Analysis and Dynamics Research', Academy of Finland , 1.1.2014–31.12.2019.
- (Vice leader of the ) Center of Excellence 'Analysis and Dynamics Research', Academy of Finland , 1.1.2008–31.12.2013.
- grant of Foundations' Professor Pool for research sabbatical 8/2012 – 7/2013.
- 'Stochastic and harmonic analysis, interactions and applications' 1.1.2006–31.12.2009.
- 'Stochastic and harmonic analysis, interactions and applications' 1.1.2003–31.12.2005.
- 'Stochastic inversion theory and harmonic analysis' 1.1.2001–31.12.2002.
- 'Operaattoritheoria Banach-avaruuksissa, funktioavaruudet ja Hilbert-muunnokset' 1996–1998, 1.1–31.7.2000.
- Visiting professor grant from Magnus Wallenberg foundation 2015
- Research grant from the Emil Aaltonen foundation 1995.
- Research grant from the Emil Aaltonen foundation 1988.
- Supervisor of 7 doctoral students: Johanna Tamminen 2004, Pekka Nieminen 2007, Hannes Luiro 2008, Matti Vihola 2010 Miika Nikula 2014 Tomas Soto 2015 Janne Junnila 2018  
Three of the above PhD:s (Luiro, Vihola and Nikula) won the Rolf Nevanlinna -prize of the best Finnish mathematics dissertation of the year.
- Currently supervising 2 doctoral students.
- Supervisor of a number of master or licenciate these.

#### **9. Major teaching duties and pedagogical competence:**

- Leader of the Candidate program 'Candidate program in Mathematical Sciences' at University of Helsinki (4 different departments participate in this program) 2016–6/2018
- Best teacher of the year award (at the Department of Mathematics and Statistics, University of Helsinki) 2014.
- Member of the Teaching Development Group at the Helsinki Department of mathematics and statistics (2014–).
- Member of the Teaching Development Group at the faculty of Science, University of Helsinki (2011-2013).
- Lectured a number of courses at several universities. Initiated several courses that are now taught regularly at Helsinki, like 'Modern real analysis' and 'Introduction to number theory'. Lectured several quite advanced courses for graduate students on various topics.
- Participated in the 'developing of teaching' committees at Technical university of Tampere and at University of Jyväskylä. Participated in the mathematics teacher education reform by giving lectures in the form of a workshop at University of Helsinki.
- Trainer and a leader of the Finnish team for International Mathematical Olympiads 1988-1992.

#### **10. Scientific awards and honours:**

- Magnus Ehrnrooth prize in mathematics 2018.
- Silver Onsager medal and Onsager professorship at NTNU 2018
- The Lorenz Lindelöf prize in mathematics in 2013.
- The Väisälä prize in mathematics in 2007.
- The Nevanlinna prize for best Finnish mathematics dissertation in year 1994.
- Silver medal at International Mathematics Olympiads (IMO 1981).

## 12. Editorial board memberships:

- Editor, *Acta Mathematica*, 2014–
- Ass. Editor, *Journal of Mathematical Analysis and Applications*, 2011–
- Ass. Editor, *Bernoulli*, 2012–2015(7)
- Editorial Adv. Board, *Concrete Operators*.
- Editor, *Arkhimedes* (the Scientific journal of the Finnish Mathematical Society and Finnish Physics society), 99 –04.

## 13. Other scientific merits and activities:

- Board memberships:
  - Member of the Scientific Board of MFO (Oberwolfach Math Res. Institute) 1/2018–
  - Member of the board of the Mittag Leffler -institute 2009–2014
  - Member of the board of Nevanlinna Colloquium 2015–
  - Member of the board of the Support Foundation of the Rolf Nevanlinna -institute 2008–2013
- Membership in scientific societies:
  - The Finnish Academy of Science and Letters: member 2007–.
  - Finnish Society of Sciences and letters ('Finska Vetenskaps-Societeten'): member 2013–
  - President of the Finnish Mathematical Society 2016–
  - Finnish Mathematical Society: member of the board 2001–2005, 2013–
  - American Mathematical Society: ordinary member.
- Acting as opponent or reviewer:
  - 7 times the opponent for a mathematics dissertation (Jyväskylä 1998, Oulu 2003, Joensuu 2008, Jyväskylä 2009, Trondheim 2013, 2015, and 2018). 2 times board member in a dissertation (Lund 2005, Barcelona 2009)
  - preliminary examiner for a number of doctoral these
  - A reviewer for NSF.
  - A reviewer for the Finnish Academy.
  - Referee for numerous mathematical articles in international journals, including *Inventiones mathematicae*, *Acta Mathematica*, *Bernoulli*, and *JFA*.
  - Reviewer for several full professor posts in Finland and abroad.
- An organizer/member of the scientific committee of conferences/workshops:
  - *Barcelona Analysis Conference 2019* (scientific committee member, Barcelona 6/2019)
  - *Analysis and Geometry of Random Shapes* (Los Angeles 1/2019, organiser, around 40 participants)
  - *Celebration of Mathematics: 150 years of Finnish Mathematical Society* (Helsinki 11-12/2018, the main organizer, around 200 participants)
  - *Interplay between Number Theory and Analysis for Dirichlet Series* (Oberwolfach 10-11/2017, a main organizer)
  - *XXIII Nevanlinna Colloquium* (Zurich 6/2017, member of the scientific committee)
  - *Mathematics meets physics* (Helsinki 6/2014, the main organizer, around 160 participants)
  - *Dirichlet Series and Function Theory in Polydiscs* (Oberwolfach 2/2014, a main organizer)

- *27:th Nordic Congress of Mathematicians*, (Lund Oslo 6/2013, a member of the scientific board)
- *Interactions Between Analysis and Geometry*, thematic spring 2013 at IPAM Los Angeles (a main organizer together with M. Bonk, J. Garnett, P. Koskela and U. Hamentädt)
- *Operator theory and analytic function spaces* (Helsinki 10/2010, a main organizer, around 45 participants)
- *25:th Nordic and 1:st British-Nordic Congress of Mathematicians* (Oslo 6/2009, a member of the scientific board of the conference, 223 participants)
- *The memorial conference for Juha Heinonen* (Ann Arbor 5/2008, a main organizer, around 100 participants)
- *FSDONA08: Function spaces, differential operators and non-linear analysis* (Helsinki 8/2008, a main organizer, around 100 participants)
- *Fourier series methods in complex analysis* (Joensuu 7/2005, a main organizer, about 20 participants)
- *Computational methods in function theory, CMFT 2005* (Joensuu 6/2005, member of the local organization board, around 250 participants)
- *Harmonic analysis and stochastics* (Jyväskylä 6/2001, a main organizer, around 35 participants)
- *Elementary operators and their applications* (Helsinki 9/2001, a main organizer, around 15 participants)
- *Functional analysis and related topics* (Helsinki 9/1999, a main organizer, around 60 participants)
- *Composition operators* (Helsinki 8/1997, the main organizer, 7 participants)
- A past leader of the seminars
  - "Harmonic analysis" (Dep. of Math/Helsinki) (1997–98).
  - "MCMC-methods and data-analysis" (Dep. of Math/Helsinki) (2000-2001),
  - "Analysis" (Dep. of Math/Tampere) (2001-2002),
  - "Stochastic analysis" (Dep. of Math. and Stat./Jyväskylä) (2002–2007),
  - "MCMC and simulation" (Dep. of Math. and Stat./Jyväskylä) (2002–2007)
  - "Geometric analysis" (Dep. of Math/Helsinki) (1999–2018).
- Currently a leader of the seminars:
  - "Geometric and Functional analysis" (Dep. of Math/Helsinki) (2018–),
  - "Stochastic models" (Dep. of Math/Helsinki) (2011–).
- Numerous invited talks at international conferences (many of them plenary) and at universities abroad. The most important lectures during last years include
  - Plenary talk at Clay Institute Workshop 'Analysis and Probability' (2018 Oxford, in conjunction with the 20:th years birthday of the Calys Institute)
  - Plenary talk at Barcelona Analysis Conference 2016
  - Plenary talk at the 2016 Finnish Mathematics Days (Turku).
  - Plenary talk at the AIP15 (Applied Inverse Problems 2015) (Helsinki)
  - Plenary talk at the 2012 Abel Symposium (Oslo)
  - Plenary talk at the 5. Ahlfors-Bers Colloquium (2011, Rice)
  - Plenary talk at the XXIst Rolf Nevanlinna Colloquium (2009 Kyoto)
- Visiting appointments abroad (at least a three weeks period):
  - Karl Weierstrass Institut, Berlin (one month in 1989),
  - University of Jena (one month in 1989),

- University of Delaware, Newark (two months in 1990),
- Mittag-Leffler Institut, Stockholm (one month in 1991),
- Mittag-Leffler Institut, Stockholm (one month in 1994),
- University of California, Santa Barbara (two months in 1996),
- University of Michigan, Ann Arbor (one month in 1996),
- Equipe d’Analysis, University of Paris VI, Paris (three months in 1997),
- Technical University of Trondheim (one month in 1998),
- Technische Universität Berlin (one month in 1998),
- University of Michigan, Ann Arbor (three weeks in 2000),
- Universität Bern (three weeks in 2001),
- University of Lund (5 months in 2005),
- IPAM reseach institute, Los Angeles (1 month in 2007),
- University of Michigan, Ann Arbor (five weeks in 2007),
- CRM (at Autonoma University of Barcelona), Barcelona (9 weeks in 2009).
- CRM (at Autonoma University of Barcelona), Barcelona (4 weeks in 2011).
- Centre for Advanced Studies, Oslo (5 weeks in 2012).
- IPAM reseach institute, Los Angeles (3,5 months in 2013)
- Lund University (1 month 2015-2016)
- NTNU (as Onsager Professor, 6 months 2018)

**12. Scientific and social impact of research:**

- 69 refereed Journal Articles, 7 refereed Proceedings Articles, total number of publications 99.
- Some of my research, especially that on Adaptive Markov Chain Monte Carlo, has been applied in several other fields of science, or in real practical applications – the paper [21] (see my list of publication) has 876 citations in ISI-Web of Science (1796 in Google Scholar). Total number of citations 4994 (Google Scholar), 2359 (ISI-Web of Science), 971 (MathSciNet).