

Curriculum vitae

Name, Date of birth: Sergei Zuyev, born August 1962

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Degrees

MSc in Mathematics, Moscow Lomonosov State University, USSR, 1979–1984; PhD in Mathematical and Physical Sciences, Moscow Lomonosov State University, USSR, 1988.

Postdoctoral work

Institut Nationale de Recherche en Informatique et en Automatique (INRIA), Sophia-Antipolis, France, Sep 1992– Jul 1994.

Postdoctoral qualifications and issuing bodies

Reader (Docent) in Higher Mathematics, National Committee for People's Education, USSR, 1991

Maître de Conférence, Ministère de l'Enseignement Supérieur et de la Recherche, France, 1994

Professeur d'Université, Ministère de l'Enseignement Supérieur et de la Recherche, France, 2009

Current position

Professor, Chair in Mathematical Statistics, Chalmers University of Technology, Göteborg, Sweden (since August 2009), won in an open competition among over 60 candidates.

Main previous employments

- 1987–1990 Lecturer, Higher Mathematics Department, Moscow Forest Engineering Institute.
- 1990–1992 Reader, Higher Mathematics Department, Moscow Forest Engineering Institute.
- Aug 1994–Jul 1998 Ingénieur-Expert (Research Fellow) at INRIA (France) under the research contract between INRIA and France Telecom.
- Feb 1998–Aug 2009 Lecturer, since Aug 2003 Reader in Statistics and Modelling Science Department of the University of Strathclyde.

Postdoctoral students and Post-Docs

Stephan Crèpé, MPhil, 1994. Adnan Abboulalla, MPhil, 1995. Konstantin Tchoumatchenko, PhD, 1998, (thesis nominated for the France National Concours of Dissertations). Dr. Vadim Shcherbakov, Post-Doc 2001-2004. Dr. Stephan Farinetto, Post-Doc 2002-2005. Christos Tachtatzis, PhD 2008 (co-directed with D. Harle). Mahmuda Khatun, MPhil, 2008. Anton Muratov, PhD, since 2009. Alexey Lindo, PhD, since 2010.

Research activities and technological relevance

My research covers a wide range of topics in Advanced Probability Theory, Applied Mathematics and Statistics. My work in these areas, especially in Stochastic Geometry, critical phenomena and telecommunications modelling is widely internationally recognised.

I have co-authored the following software packages: ARC (modelling of large telecommunication systems), mefista and medea (R/SPLUS statistical computing library for optimisation on measures) and PVAT (simulation of Poisson- Voronoi aggregative tessellations), Virtual Learning Environment STATS VLE. The prototype of a simulator ARC is currently used at France Telecom. STATS VLE is used as a

unified teaching environment for 4 courses at Chalmers (over 250 students all together) and other 2 courses are planned for 2011-12. The other packages are freely available to the research community under GPL2 licence.

International standing and dissemination of results

My research has lead to collaboration and invited visits to work with researchers in Australia, Denmark, France, Germany, Hong-Kong, Russia, U.K, U.S.A. with whom I co-authored many of my over 50 publications in leading international revues.

I was an organiser of the International Workshop on Spatial Methods in Telecommunications in Dagstuhl (1998), International Conference “New Directions in Applied Probability: Stochastic Networks and Beyond”, Edinburgh (2006) and an invited speaker at a number of international conferences on applied probability: Eindhoven (2000), Sophia-Antipolis (2003), Lausanne (2005), Novosibirsk (2006), Compiègne (2008), Madrid (2010), Stanford (2011).

Main grants and awards

- Research grant from “Mezenles” industry company on development of traffic models (1988-1990).
- Three Research grants (1992-1993, 1993-1995 and 1995-1998) with France Telecom on stochastic geometry modelling of wide-area networks.
- British Council – France grant on Geometric interpretations of stable laws (2002)
- BBSRC grant (2001–2004, £63,700) on Application of Stochastic Geometry to understanding transport of micro-organisms in soil.
- EPSRC grant on Spatial Stochastic Modelling and optimisation of future broadband telecommunications networks (2002–2005, £111,271)
- VR grant Optimisation of functionals of measures: point processes and algorithms (2010–2012, 2 242 000 SEK)

In the framework of the EPSRC grant I was directing the work of two research teams of nine people which included two full-time Research Fellows and a Post-graduate student. Both Research Council grants involved interdisciplinary collaboration with Biomathematics and Statistics Scotland (BIOSS), Aberdeen, University of Glasgow and Electronic and Electrical Engineering Department of the University of Strathclyde. Results of both grants were rated as internationally leading. Current VR grant employs a PhD student and promises further development of methodology and technique of optimisation of functionals of measures which have numerous application in science and engineering.

Winner of Year 2001 Marcel F. Neuts Applied Probability Award attributed annually by the Applied Probability Foundation of America for “a seminal contribution in the area of Applied Probability”.

Editorial work

Associated editor of the journal Queueing Systems (Springer)