

cv Stefan Thurner

Complex Systems Research Group (Head)
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Santa Fe Institute
1399 Hyde Park Road
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USA

Date of Birth: February 1969
Place of Birth: Innsbruck, Austria
Nationality: Austrian
Languages: German, English, Spanish, (French), (Italian)

Education

- Habilitation (Theoretical Physics), Vienna University of Technology, 2001
- Dr.rer.soc.oec. (PhD in Financial Economics), University of Vienna, 2001 (honors)
- CCEFM program in finance 1998-2000
- Dr.techn. (PhD in Theoretical Physics), Vienna University of Technology, 1995 (honors)
- Magister rer.nat. (MS in Theoretical Physics), University of Vienna, 1993 (honors)

Career History

- External Professor at Santa Fe Institute (from July 2007)
- Fellow at the Collegium Budapest (from March 2007)
- Associate Professor at Medical University Vienna (2004-present)
- Associate Professor (a.o. Universitätsprofessor, tenure) at University of Vienna (2001-2004)
- Tenure track position (Universitätsassistent) at University of Vienna (1999-2001)
- Postdoctoral Position at Vienna University of Technology, Vienna (1998-1999)
- Member of NuHAG, Institute of Mathematics, University of Vienna (1997-present)
- Research Associate at Boston University, Boston (1996-1997)
- Postdoctoral Position at Humboldt University, Berlin (1996)
- Guest researcher at Columbia University, New York (1996)
- Guest researcher at Universidad de Zaragoza, Zaragoza, Spain (1995)
- Guest researcher at Columbia University, New York (1995)

Scientific Interests

- Complex Systems: (1) Bioinformatics (2) Network theory (3) Evolutionary processes (4) Entropy formulations (5) Fractal time series analysis
- Life Sciences: (1) Reconstruction of gene regulatory networks (2) Control and analysis of biological rhythms (3) Cell motility
- Numerical Mathematics: (1) Wavelet analysis (2) Diffusion processes (3) Fractal harmonic analysis
- Econophysics: (1) Stochastic calculus (2) Arbitrage pricing (3) Banking regulation
- Particle Physics: Topology of Quantum Gauge Fields

Publications/Patents

- About 100 publications in journals like Physical Review Letters, Physical Review D and E, Nuclear Physics B, J Quantitative Finance, Neuroimage, J Pathology, Europhysics Letters, Histochemical Cell Biology, Physica A, Applied Bioinformatics or Physical Letters. Publications cover quantum chromodynamics, statistical mechanics of complex systems, medical- and biophysics, network theory, stochastic processes, fractal timeseries, financial models
- Three patents pending

Conferences

- About 20 invited talks and lectures at international conferences and summer schools. About 100 talks at conferences, workshops and seminars

Reviews/Mass Media

- Der Standard, Suche nach dem Selbstbewusstsein, October 18 2006
- News, Die kreativsten Köpfe, September 21 2006
- Der Standard, STANDARD-Interview: Ich sitze zwischen allen Stühlen, May 24/25 2006
- Profil News Magazine, Portrait Complex Systems Research Group, March 27 2006
- Universum Magazin, Auf dem Weg zur Systembiologie, December Issue 2005
- Der Standard, Genies im Clusterland, nicht im Kämmerlein, November 14 2005
- Datum, Mathematik der Macht, September Issue 2004
- Gegenworte, Vom Mekka zur Denkfabrik, Spring Issue 2004
- Der Standard, Eine kleine Lücke, ein grosser Kollaps, April 26 2004
- Austrian National Television ORF, Modern Times, December 5 2003
- ORF science online: November 2003, WWTF fördert zehn Life Science-Projekte
- Austrian National Television ORF, Modern Times, November 7 2003
- Profil News Magazine, September 2003, Portrait of Stefan Thurner
- ORF science online: April 2002, Fraktale Geometrie in der Krebsforschung
- Austrian National Broadcast ORF 1, Dimensionen, Welt der Wissenschaft, February 28 2000
- ÄrzteWoche 25: June 1999: Fraktale Prozesse als Prognosefaktor
- Austrian National Broadcast ORF 1, Dimensionen, Welt der Wissenschaft, November 6 1998
- Physical Review Focus: September 15 1998, Separating the Good Hearts from the Bad
- Profil: March 30 1998, Infarkt Mathematik
- UniSci: February 19 1998, Wavelet Analysis Of Heartbeat Spots Congestive Heart Failure
- Science Now: February 6 1998, Cardiology by the Numbers

Prizes

- WWTF Life Science Award 2003 (2003)
- Research Stipend of the Austrian Ministry of Science, BMWFK (1995)
- Vienna University Prize (1994), awarded by the "Gewerbliche Wirtschaft, Wien" shared with M. Feurstein and H.G. Feichtinger

Funding (Project Leader)

- Austrian Science Fund FWF Project P19132 (2006-2009)
- Austrian Science Fund FWF Project P17621 (2004-2007)
- WTZ/OEAD: Bilateral Project: Slovenia-Austria SI-AT/04-05/01
- WWTF Project LS139 (2004-2007)
- Austrian Science Fund FWF Project P16022 (2002-2004)
- Austrian National Bank Project P8584 (2000-2003)
- Austrian Scientific Community P065984 (2000)
- Austrian Scientific Community P065094 (1998)
- Austrian Scientific Community P064793 (1997)
- Austrian Scientific Community P063389 (1995)

total volume > 1 mio EUR

Work experience non scientific

- Consulting (2003-present)
- Development Program *Paz y bien*, Cartagena, Columbia (1989-present, president since 2005)
- Chamber music concerts, clarinetist of the *Dilletanti Musici* (1992-present)