



Prof. Dr. Dr.h.c. Erich Walter Farkas

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Professor, Program Director
Master of Science UZH ETH in Quantitative Finance

27. February 1967
Swiss & Romanian citizen

Current professional activities

- Professor for Quantitative Finance, Department of Finance, University of Zurich (UZH), since 02/2009
- Associated Professor, Department of Mathematics, ETH Zurich, since 02/2009
- Program Director: joint UZH ETH Zurich specialized program "Master of Science in Quantitative Finance" (first joint degree program of UZH and of ETH), since 2009
- Program Director: UZH postgraduate program "Certificate of Advanced Studies (CAS) in Risk Management for Banking and Finance", since 2010
- Deputy Head: UZH postgraduates programs "Advanced Studies in Finance", since 2010
- Member of the UZH Executive Education Board, since 2021
- Faculty Member, Swiss Finance Institute, since 2013
- Lecturer for Quantitative Finance (since 2017) and Member of the Examination Committee at DOFIN (since 2013), Bucharest University of Economic Studies

Academic degrees

05/2003	<i>Habilitation</i> , University of Munich, Germany Thesis: Function spaces of generalised smoothness and pseudo-differential operators associated to a continuous negative definite function
07/1998	<i>Ph.D. in Mathematics (Dr.rer.nat.)</i> , University of Jena, Germany Summa cum laude, Supervisor: Prof. Dr. Hans Triebel
06/1990	<i>M.Sc. in Mathematics</i> , University of Bucharest, Romania Maximum possible overall marks 10.0/10.0
06/1989	<i>Diploma in Mathematics</i> , University of Bucharest, Romania Maximum possible overall marks 10.0/10.0

Postgraduate education

01/2018 - 12/2018	CAS for Board Members (Zertifizierte Verwaltungsräte) Bern-Rochester program, University of Bern
08/2004 - 12/2004	Leadership course (Aufbaumodul Führung); ETH Zürich
10/2004 - 02/2005	Advanced Studies in Corporate Finance, University of Zurich

Highlights

- Dr.h.c. *Doctor Honoris Causa* of the Bucharest University of Economic Studies, November 2023
- Prize 'Simion Stoilow' for Mathematics of the Romanian Academy of Science for the four scientific articles on "Differential operators" published in the year 2001 (awarded Dec. 2003)
- Call for Professor (with direct tenure) at Baruch College, City University of New York, 2007

Previous employment

10/2003 - 02/2009	<i>Scientific Managing Director (wissenschaftlicher Abteilungsleiter)</i> University of Zurich Program Director "Master of Advanced Studies in Finance" <i>Reader</i> at the ETH Zürich, Department of Mathematics and at the University of Zurich, Swiss Banking Institute
10/2000 - 09/2003	<i>Senior Research and Teaching Assistant (post-doc)</i> , Mathematics, University of Munich, Germany
05/2000 - 09/2000	<i>Senior Research and Teaching Assistant (post-doc)</i> , Mathematics, University of Regensburg, Germany Chair: Applied Mathematical Analysis (Prof. Dr. Heinz Siedentop)
08/1998 - 04/2000	<i>Research Associate</i> , Project of The German Union for Research (DFG) Institute for theoretical Informatics and Mathematics University of Federal Armed Forces Munich, Germany
11/1995 - 07/1998	<i>Ph.D. Research fellowship</i> of The German Union for Research (Deutsche Forschungsgemeinschaft - DFG), Friedrich-Schiller-University of Jena, Germany
09/1994 - 10/1995	<i>Research and Teaching Assistant</i> , Department of Mathematics University of Bucharest, Romania
10/1993 - 10/1994	<i>Research fellowship</i> of The German Office for Academical Exchanges (DAAD) Johannes-Gutenberg-University of Mainz, Germany
09/1990 - 09/1993	<i>Teaching Instructor (Preparator)</i> , Department of Mathematics University of Bucharest, Romania

Academic summary

- **Research**

- More than 30 publications in relevant peer-review journals like: *Journal of Risk and Financial Management* (2023), *Frontiers of Mathematical Finance* (2022), *Mathematical Finance* (2021), *Journal of Corporate Finance* (2020) *Review of Derivatives Research* (2019) *Journal of Banking and Finance* (2017), *Journal of Computational Finance* (2016), *Mathematics and Financial Economics* (2015), *Finance and Stochastics* (2014), *Insurance: Mathematics and Economics* (2014), *Quantitative Finance* (2013), *Review of Deriv. Research* (2013).

- **(Selected) Invited talks / Paper presentations**

- More than 25 invited seminar talks in finance seminars, e.g. Vienna University of Economics (2018), TU Munich (2018), ESSEC Business School Paris (2013), University of Kent at Canterbury (UK, 2013, 2015), University of Trier (Germany, 2012), University of Birmingham (UK, 2010 and 2012), etc.
- Highlights: plenary speaker, Conference "Frontiers of Interdisciplinary Mathematics" (Penn State University, USA, 2017), invited talk, Conference "Innovations in Insurance, Risk- and Asset Management" (Munich, Germany 2017)

- **Teaching**

- Several courses taught on several aspects of mathematical methods for (and related to) finance at all levels (Bachelor, Master, PhD, Executive Education) both at University of Zurich and at ETH Zurich.

- **PhD Thesis supervision**

- Urban Ulrych, University of Zurich, 2022; Alexander Smirnow, University of Zurich, 2022; Ludovic Mathys, University of Zurich, 2020; Boris Wälchli, University of Zurich, 2016; Cosimo-Andrea Munari, ETH Zürich, 2015; Robert Huitema, University of Zurich, 2014; Erdinc Akyildirim, University of Zurich, 2013

Knowledge transfer: Conferences / organisation

- Approximatively 30 conferences organized in the last 10 years, mostly in Zurich, but also in Berlin, at Penn State University, and in Beijing, with a focus on financial risk management, especially the yearly "ETH Risk Day".
- Organiser of about 25 conferences for the Swiss Risk Association and for the Zurich Chapter of PRMIA (Professional Risk Management International Association) in the last 10 years.

Grants

- Swiss National Science Foundation (SNSF) BRIDGE grant of CHFm 1.5. together with Prof. Wolfgang Breymann and Prof. Tim Weingärtner for the project "Data Driven Financial Risk and Regulatory Reporting", April 2022 – March 2026.
- FP7 Marie Curie project "Heterogeneity and the Volatility of Financial Assets" (HETEROVOL 627701), funded with *EURO 268'000*, April 2015 - March 2017.
- Swiss National Science Foundation (SNSF) project 51NF40-144611, "Knowledge transfer project to the financial services industry: Capital adequacy, valuation and portfolio optimization for insurance companies", grant of *CHF 110'000* for the time 1. June 2012 - 30. May 2014.
- SCIEX project 11.159 – Sciex - N - 4 "Interaction of agents and asset price dynamics", grant of *CHF 90'000*, to support a post-doctoral researcher from Romania, 1. Oct. 2012 - 30. Sept. 2013, (SCIEX is a research program of the Swiss Confederation for supporting the new members of the European Union).
- relevant contribution to establishing the "Center for Finance and Insurance" at University of Zurich, grant of *CHF 2'000'000* from SwissRe, May 2013.

Former academic assignments

- Representative of the Department of Banking and Finance: "UZH Committee for Academic Career Development and Research Committee of the Swiss National Science Foundation" 2013–2019
- Delegate of the UZH Rector: Foundation Council of the pension fund WWPK (Witwen-, Waisen-Pensionskasse der UZH), 2013–2017
- Founder and Co-president of the NPO "Swiss Risk Association", 2013–2021

Consulting projects

- KPMG Switzerland, Quantitative Finance Group, 2011-2015
- Deloitte Switzerland, Financial Risk Management Group, 2007-2010