# Ilya Zaliapin, Professor of Statistics

Department of Mathematics and Statistics University of Nevada Reno (UNR)

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## **CURRICULUM VITAE**

Education	
1999	Ph.D. (Mathematics and Physics)
	MITPAN, Russian Academy of Sciences, Moscow
	Advisors: Prof. V.F. Pisarenko, Prof. V.I. Piterbarg.
1995	M.S. (Probability and Statistics)
	Lomonosov Moscow State University, Dept. of Probability Theory
	Advisor: Prof. V.I. Piterbarg.

## Fields of interest

Applied probability and statistics with applications to statistical seismology, hydrology, climate, biology, and finance.

# **Professional experience**

2016 – present	Professor, Dept. of Mathematics and Statistics, UNR
2022 - present	Trevor J. McMinn Endowed Research Professor
2021 - present	Director, Graduate Program in Statistics and Data Science
2016 – 2018	Director, Graduate Program in Statistics and Data Science
2015 – 2016	Vice-Chair, Dept. of Mathematics and Statistics, UNR
2009 – 2016	Associate Professor, Dept. of Mathematics and Statistics, UNR
2006 - 2009	Assistant Professor, Dept. of Mathematics and Statistics, UNR
2001 – 2006	Assistant Researcher, Institute of Geophysics and Planetary Physics
	University of California Los Angeles
1999 – 2001	Postdoctoral Fellow, Institute of Geophysics and Planetary Physics
	University of California Los Angeles

### Bro

Commission on Mathematical Geophysics, International Union of Geodesy and
Geophysics (IUGG), Secretary since 2013
Associate Editor, Journal of Geophysical Research-Solid Earth (AGU)
Editor, Nonlinear Processes in Geophysics (EGU/AGU)
Committee on Prob. and Stat. in Physical Sci.,
Bernoulli Society for Mathematical Statistics and Probability, Chair 2013 – 2015
Associate Editor, Journal of Environmental Statistics (UCLA)
Planning Committee, Southern California Earthquake Center
Secretary, Natural Hazards Focus Group, Am. Geophys. Union (AGU)

2022 Trevor J. McMinn Endowed Research Professorship in Science

2020 Fulbright U.S. Scholar

2015 UNR Hyung K. Shin Outstanding Research Award

2010 UNR Westfall Scholar Mentor

Conference/workshop organizing: 4 IUGG CMG conferences, 5 workshops, 19 special sessions/symposia at international meetings

Review services: Springer, Cambridge University Press, Chapman & Hall, U.S. National Science Foundation (NSF), Canada Foundation for Innovation (CFI); Czech Science Foundation (CSF); Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT), Chile: 30 academic journals including Science, Proceedings of the National Academy of Sciences (PNAS); Physical Review Letters (PRL), Annals of Applied Statistics (AOAS)

Research grants: Over \$1,400K of external support in 30 projects funded by NSF, USGS, SCEC, DOE, and DOS

Publications: 81 papers in peer-refereed journals, 1 book (co-editor), 167 published abstracts (hindex 34 according to Google Scholar)

> Ilya Zaliapin Updated: 6/15/2022

Advising: 1 postdoc, 13 graduate students, 6 undergraduate students

#### **Selected Publications:**

- Kovchegov Y., I. Zaliapin and E. Foufoula-Georgiou (2022) Random Self-similar Trees: Emergence of Scaling Laws, Surveys in Geophysics, 43, 353–421. https://doi.org/10.1007/s10712-021-09682-0
- Kovchegov, Y. and I. Zaliapin (2020) Random Self-Similar Trees: A Mathematical Theory of Horton Laws. *Probability Surveys*, 17, 1–213. https://doi.org/10.1214/19-PS331
- 3. Zaliapin, I. and Y. Ben-Zion (2020) Earthquake declustering using the nearest-neighbor approach in space-time-magnitude domain. *J. Geophys. Res.: Solid Earth*, e53991. https://doi.org/10.1029/2018JB017120
- Tejedor, A., A. Longjas, I. Zaliapin, and E. Foufoula-Georgiou (2015) Delta channel networks: 1. A graph-theoretic approach for studying connectivity and steady-state transport on deltaic surfaces. Water Resources Research, 51, 3998–4018. <a href="https://doi.org/10.1002/2014WR016577">https://doi.org/10.1002/2014WR016577</a>
- 5. Zaliapin, I. and Y. Ben-Zion (2013a) Earthquake clusters in southern California, I: Identification and stability. *J. Geophys. Res.: Solid Earth*, 118, 2847–2864. https://doi.org/10.1002/jgrb.50179
- Zaliapin, I., A. Gabrielov, V. Keilis-Borok, and H. Wong (2008) Clustering analysis of seismicity and aftershock identification. *Phys. Rev. Lett.*, 101, 018501. https://doi.org/10.1103/PhysRevLett.101.018501
- 7. Zaliapin, I., Y. Kagan, and F. Schoenberg (2005) Approximating the distribution of Pareto sums, *Pure. Appl. Geophys.*, 162, 1187-1228. https://doi.org/10.1007/s00024-004-2666-3

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