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## CURRICULUM VITAE

Personal info: born on March 6, 1973 in the city of Chelyabinks, RUSSIA; married; one child

### Education

- 1999      PhD (Mathematics and Physics)  
            Intl. Inst. for Earthquake Prediction Theory and Mathematical Geophysics,  
            Russian Academy of Sciences, Moscow  
            Advisors: Prof. V.F. Pisarenko, Prof. V.I. Piterbarg.
- 1995      MSc (Probability and Statistics)  
            Lomonosov Moscow State University, Dept. of Probability Theory  
            Advisor: Prof. V.I. Piterbarg.

### Fields of interest

Multiscale methods of time series analysis; sums of heavy-tailed random variables;  
spatial statistics; dynamical systems, lattice (hierarchical) models

### Professional experience

- 2006 – present      Assistant Professor, Dept. of Mathematics and Statistics,  
                            University of Nevada, Reno
- 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
- 1994 – 1999      Research Scientist, International Institute of Earthquake Prediction Theory  
                            and Mathematical Geophysics, Russian Academy of Science, Moscow

### Publications

32 papers in peer-refereed journals, 45 published abstracts.

### Course development

- Statistics: Discrete Methods*  
Dept. of Math & Stat. (UNR STAT453/653), 2007
- Time Series*  
Dept. of Math. & Stat. (UNR STAT 758), 2006
- Paradoxes of Random Events*  
UCLA Fiat Lux Seminar (UCLA STATS 19), 2005
- Introduction to Statistical Methods for Physical Sciences and Engineering*  
Dept. of Statistics, UCLA (UCLA STATS 14), 2004
- Geo-complexity and Earthquake Prediction*  
Earth and Space Sciences Dept. UCLA (with Prof. V. Keilis-Borok), 2002-2005
- Statistical Methods in Geophysical Sciences*  
MITPAN, Russian Ac. Sci., 2000

### Teaching

- Spring 2008 (UNR MATH/STAT 352): *Probability and Statistics*
- Spring 2008 (UNR MATH 792): *Topics in Probability*
- Fall 2007 (UNR MATH/STAT 352): *Probability and Statistics*
- Fall 2007 (UNR STAT 453/653): *Statistics: Discrete Methods*
- Spring 2007 (UNR MATH/STAT 352): *Probability and Statistics*
- Spring 2007 (UNR MATH 176): *Calculus for Business*
- Fall 2006 (UNR STAT 758): *Time Series*
- Fall 2005 (UCLA STATS 19): *Paradoxes of Random Events*
- Spring 2005 (UCLA STATS 110A): *Applied Statistics*
- Spring 2005 (UCLA STATS 189): *Paradoxes in Theory of Probability and Statistics*
- Fall 2004 (UCLA STATS 14): *Introduction to Stat. Methods for Phys. Sci. and Engineering*
- Fall 2000, Russian Ac. Sci.: *Statistical Methods in Geophysical Sciences*

TA:

Spring 2005 (UCLA ESS 204), Winter 2004 (UCLA ESS 275), Spring 2003 (UCLA ESS 275),  
Spring 2002 (UCLA ESS 298) (*Geo-complexity and Earthquake Prediction*, by V. Keilis-Borok)

Advising

Tyson Reed (grad), UNR, Dept. Math & Stat, 2008 –  
Renee Torres (grad), UNR, Dept. Math & Stat, 2007 –  
Sayaka Olsen (grad), UNR, Dept. Math & Stat, 2007-  
Ellen Webb (undergrad), UNR, Dept. Math & Stat, 2007-2008  
Brehnen Wong (grad), UNR, Dept. Math & Stat, 2007-2008  
Suresh Kumar (grad), UNR, Dept. Math & Stat, 2006-07  
Henry Lam Wong (Post-Doc), IGPP, UCLA, 2004 – 2005

Academic services

Curriculum committee, Dept. Math. & Stat., UNR, 2006-08 (member)  
PhD program committee, Dept. Math. & Stat., UNR, 2006-08 (member)  
Colloquia committee, IGPP/UCLA, Fall 2005 (member), Spring 2006 (chair)

Conference organizing

“*Scaling, Cascades and Predictability of Earthquakes*” (session NG62B)  
at the Fall AGU meeting, San-Francisco, December 6-10, 2002.  
“*Scaling, cascades and self-organized criticality in Earthquakes: Damage mechanics  
and predictability*”  
at EGS-AGU-EUG Joint Assembly, Nice, France 6-11 April, 2003

Editorial services

Associate Editor for *Journal of Environmental Statistics*

Review services

Springer, Geosciences  
Chapman & Hall/CRC, Statistics  
*Communications in Statistics – Simulation and Computation*  
*Communications in Nonlinear Science and Numerical Simulations*  
*Physical Review Letters*  
*Physical Review E*  
*Pure and Applied Geophysics*  
*Tectonophysics*  
*Geophysical Research Letters*  
*Geophysical Journal International*  
*Journal of Geophysical Research*  
*Nonlinear Processes in Geophysics*  
*Earth and Planetary Science Letters*  
*Earth, Planets, and Space*, Japan

Professional membership

Institute of Mathematical Statistics (IMS)  
American Geophysical Union (AGU)  
Southern California Earthquake Center (SCEC)

Research grants

2008-2009 *Modeling seismic moment release in San Andreas Fault – Great Basin system*,  
Southern California Earthquake Center (SCEC), PI (\$20,000)  
2007-2010 *Collaborative Research: Robust climate projections and stochastic stability of  
dynamical systems*, DOE Grant ER64440, PI (\$60,000)  
2006-2008 *Subjective decision making in presence of uncertainties – a theoretical  
approach*, Junior Faculty Research Grant, UNR, PI (\$15,000)  
2006-2007 *Statistical modeling of seismic moment release in San Andres fault system*,  
Southern California Earthquake Center (SCEC), PI (\$9,999)  
2006-2009 *CMG Collaborative Research: Stochastic Quantization for Modeling the  
Dynamics of Regional Seismicity*, NSF ATM 0620838, PI (\$247,869)

- 2005-2006 *Estimating the long-term rate of seismic moment release from the observed seismicity*, Southern California Earthquake Center (SCEC), PI (\$16,998)
- 2004-2006 *CMG Collaborative Research: Cellular Automata, Directed Graphs, and the Modeling of Earthquake and Landforms*, NSF ATM 0327558, senior personnel
- 2004-2008 *E2-C2: Extreme Events: Causes and Consequences*  
European Commission, 6-th Framework Program on Research, Technological Development and Demonstration, senior personnel
- 2004-2005 *Development of Reverse Detection of Precursors Tutorial*, Southern California Earthquake Center (SCEC), Co-PI (\$20,000)
- 2003-2004 Independent International Association (INTAS), grant 0748, senior personnel
- 2001-2003 *Understanding and Prediction of Critical Transitions in Complex Systems*  
21-st Century Science Initiative of James S. McDonnell Foundation  
Collaborative Award #20002066, senior personnel

## Publications

### A. Preprints

1. Gabrielov, A., V. Keilis-Borok, and I. Zaliapin (2008) Predictability of extreme events in a branching diffusion model. Submitted.
2. Semenova, I., A. Burakov, N. Berardone, I. Zaliapin, T. Svitkina, A. Kashina, and V. Rodionov (2008) Actin dynamics is essential for myosin-based transport of membrane organelles. Submitted.

### B. Papers

1. Zaliapin, I., A. Gabrielov, V. Keilis-Borok, and H. Wong (2008) Clustering analysis of seismicity and aftershock identification. *Phys. Rev. Lett.*, 101, 018501. doi: 10.1103/PhysRevLett.101.018501
2. Ghil, M., I. Zaliapin, and S. Thompson (2008) A delay differential model of ENSO variability: parametric instability and the distribution of extremes. *Nonlin. Proc. Geophys.*, to appear.
3. Gabrielov, A., V. Keilis-Borok, Y. Sinai, and I. Zaliapin (2008) Statistical properties of the cluster dynamics of the systems of statistical mechanics. ESI Lecture Notes in Mathematics and Physics, European Mathematical Society, G. Gallavotti, W. Reiter and J. Yngvason (Eds.), to appear.
4. Ghil, M., I. Zaliapin, and B. Coluzzi (2008) Boolean Delay Equations: A Simple Way of Looking at Complex Systems. *Physica D*, to appear.
5. Slepchenko, B., I. Semenova, I. Zaliapin, and V. Rodionov (2007) Switching of membrane organelles between cytoskeletal transport systems is determined by regulation of the microtubule-based transport, *J. Cell Bio.*, doi: 10.1083/jcb.200705146.
6. Keilis-Borok, V., A. Soloviev, A. Gabrielov, and I. Zaliapin (2006) Change of scaling before extreme events in complex systems. *Pontificae Academiae Scientiarum, Acta 19, The Proceedings of the Plenary Session on Predictability in Science: Accuracy and Limitations*, 3-6 November 2006, pp. 37-45.
7. Ghil, M., et I. Zaliapin (2006) Une nouvelle source de fractales: les équations booléennes avec retard, et leurs applications aux sciences de la planète, in *L'irruption des géométries fractales dans les sciences, Une apologie de l'oeuvre de Benoît Mandelbrot*, Editions de l'Académie Européenne Interdisciplinaire des Sciences, Paris, pp. 161-187. (In French)
8. Cvitanic, J., B. Rozovskii, and I. Zaliapin (2006) Numerical estimation of volatility values from discretely observed diffusion data, *Comp. Finance*, 9(4), 1-36.
9. Zaliapin, I., H. Wong, and A. Gabrielov (2006) Hierarchical Aggregation in Percolation Model, *Tectonophysics*, 413, 93-107.
10. Keilis-Borok, V., P. Shebalin, A. Gabrielov, D. Turcotte, and I. Zaliapin (2006) Short-term earthquake prediction by reverse analysis of lithosphere dynamics, *Tectonophysics*, 413, 63-75.
11. Cvitanic, J., R. Liptser, B. Rozovskii, and I. Zaliapin (2005) Filtering volatility from data observed at random time intervals, *Proceedings of the 7th Workshop on Stochastic Numerics, Research Institute for Mathematical sciences, Kyoto University, Japan*, pp. 1-25.
12. Zaliapin, I., Y. Kagan, and F. Schoenberg (2005) Approximating the distribution of Pareto sums, *Pure. Appl. Geophys.*, 162, 1187-1228.
13. Zaliapin, I., H. Wong, and A. Gabrielov (2005) Inverse cascade in percolation model: Hierarchical description of time-dependent scaling, *Phys. Rev. E*, 71, 066118.
14. Zaliapin, I., I. Semenova, A. Kashina, V. Rodionov (2005) Multiscale trend analysis of microtubule transport in melanophores, *Biophysical J.*, 88(6): 4008-4016.

15. Zaliapin, I., A. Jin, Z. Liu, K. Aki, and V. Keilis-Borok (2005) Temporal (un)correlations between coda  $Q^{-1}$  and seismicity – Multiscale Trend Analysis, *Pure. Appl. Geophys.*, 162, 827-841.
16. Pisarenko, V. F., A. A. Lyubushin, M. V. Bolgov, T. A. Rukavishnikova, S. Kanyu, M. F. Kanevskii, E. A. Savel'eva, V. V. Dem'yanov, and I. V. Zaliapin (2005) Statistical Methods for River Runoff Prediction, *Water Resources*, 32, 2, 115–126.
17. Zaliapin, I., A. Gabrielov, and V. Keilis-Borok (2004) Multiscale Trend Analysis, *Fractals*, 12 (3), 275-292.
18. Kashina, A., I. Semenova, P. Ivanov, E. Potekhina, I. Zaliapin, and V. Rodionov (2004) Protein kinase A that regulates intracellular transport forms complexes with molecular motors on organelles, *Current Biology*, 14, 1-20.
19. Shebalin, P., V. Keilis-Borok, I. Zaliapin, S. Uyeda, T. Nagao, and N. Tsybin (2004) Advance short-term prediction of the large Tokachi-oki earthquake, September 25, 2003,  $M=8.1$  A case history, *Earth Planets Space*, 56, 715-724.
20. Grasso, J.-R. and I. Zaliapin (2004) Predictability of volcano eruption: lessons from a basaltic effusive volcano, *Geophys. Res. Lett.* 31, No. 5, L05602, doi: 10.1029/2003GL019022.
21. Zaliapin, I., Keilis-Borok, V., and Ghil M. (2003) A Boolean Delay Model of Colliding Cascades. I: Multiple Seismic Regimes, *J. Stat. Phys.*, 111, 3-4, 815-837.
22. Zaliapin, I., Keilis-Borok, V., and Ghil M. (2003) A Boolean Delay Model of Colliding Cascades. II: Prediction of Critical Transitions, *J. Stat. Phys.*, 111, 3-4, 839-861.
23. Keilis-Borok, V., P. Shebalin, and I. Zaliapin (2002) Premonitory Patterns of Seismicity Months Before a Large Earthquake: Five Case Histories in Southern California. *Proc. Nat. Ac. Sci.*, 99, 16562-16567.
24. Zaliapin, I., Z. Liu, G. Zöller, V. Keilis-Borok, and D. Turcotte (2002) On increase of earthquake correlation length prior to large earthquakes in California. *Comp. Seismol.*, 33, 141-161.
25. Zaliapin, I., Keilis-Borok, V., and Axen G. (2002) Premonitory Spreading of Seismicity Over the Fault's Network in S. California: precursor *Accord*, *J. Geophys. Res.*, 107, 2221.
26. Peresan, A., Rotwain, I., Zaliapin I., and Panza. G. F. (2002) Stability of intermediate-term earthquake predictions with respect to random errors in magnitude: the case of Central Italy, *Phys. Earth Planet. Int.*, 130, 117-127.
27. Gabrielov, A. M., Keilis-Borok, V. I., Zaliapin I. V., and Newman W. I. (2000) Critical transitions in colliding cascades. *Phys. Rev. E*, 62, 237-249.
28. Gabrielov, A. M., Zaliapin I. V., Keilis-Borok, V. I., and Newman W. I. (2000) Colliding Cascades as a Model for Earthquake Prediction. *Geophys. J. Int.*, 143, 427-437.
29. Shebalin P., I. Zaliapin, and V. Keilis-Borok (2000) Premonitory raise of the earthquakes correlation range: Lesser Antilles, *Phys. Earth Planet. Int.*, 122: 3-4, 241-249.
30. Pisarenko, V. F., Zaliapin, I. V., Kuznetsov, I. V., Lyubushin, A. A., Kushnir A. F., and Rukavishnikova, T. A. (2000) Applied analysis of point processes and fields. Statistical analysis of seismic migration. *Comp. Seismol.* 31. (In Russian).
31. Zaliapin, I. V. (1999) Statistical analysis of point fields and its application to the problem of detecting seismic migration. *Ph.D. thesis*. International Institute of Earthquake Prediction Theory and Mathematical Geophysics, Russian Ac. Sci., Moscow. (In Russian).
32. Zaliapin, I. V., and Pisarenko, V. F. (1999) On some properties of the estimation of the coefficient of variation of a point process' interoccurrence times. *Proc. of Chelyabinsk Sci. Center* 3, 6-10. (In Russian).
33. Zaliapin, I. V., Kuznetsov I. V., and Pisarenko, V. F. (1998) Estimation of voting results under existence of interrelations of respondents' opinions. *Proc. of Chelyabinsk Sci. Center* 1, 99-108. (In Russian).

## C. Abstracts

1. Zaliapin, I. and M. Ghil (2008) A delay differential model of ENSO variability: Extreme values and stability analysis. *Proceedings of the International Symposium "Topical Problems of Nonlinear Wave Physics 2008", Section "Global and Synoptic Nonlinear Processes in the Atmosphere"*, Nizhny Novgorod, Russia, July 20-26, 2008, Abstract 3-52, pp.100-101.
2. Zaliapin, I., A. Gabrielov, V. Keilis-Borok, and H. Wong (2008) Aftershock identification and clustering analysis of seismicity (INVITED). *Seism. Res. Lett.*, 79(2): 335. Annual Meeting of Seismological Society of America, Santa Fe, NM, April 16-19, 2008.
3. Ghil, M., M. Chekroun, E. Simonnet, and I. Zaliapin (2008) Robust climate projections and stochastic structural stability of dynamical systems. Joint Mathematics Meeting of AMS, San Diego, CA, January 6-9, Abstract 1035-37-1713.
4. Zaliapin, I., M. Ghil, and S. Thompson (2007) A delay differential model of ENSO variability: parametric instability and the distribution of extremes, *EOS Trans. AGU*, 88(52), Fall Meet. Suppl. Abstract NG32A-02.
5. Gabrielov, A., V. Keilis-Borok, and I. Zaliapin (2007) Predictability of extreme events in spatially distributed driven hierarchical systems, *EOS Trans. AGU*, 88(52), Fall Meet. Suppl. Abstract NG34A-03.
6. Keilis-Borok, V., I. Zaliapin, and A. Gabrielov (2007) Aftershock identification problem via the nearest-neighbor analysis for marked point processes, *EOS Trans. AGU*, 88(52), Fall Meet. Suppl. Abstract NG31A-04.
7. Zaliapin, I., M. Ghil, and S. Thompson (2007) A delay differential model of ENSO variability: Instabilities and the distribution of extremes. *Proc. Climate Change Prediction Program Meeting, Indianapolis, September 17-19, 2007*.
8. Zaliapin, I., S. Kumar, Y. Kagan, and F. Schoenberg (2007) Statistical modeling of seismic moment release in San Andreas fault system, *Southern California Earthquake Center (SCEC) 2007 Annual Meeting, September 9-12, Palm Springs, California*.
9. Ghil, M. and I. Zaliapin (2007) Extreme events: Some theoretical and practical considerations, *Eos Trans. AGU*, 88(23), Jt. Assem. Suppl., Abstract U32B-01 (INVITED)
10. Zaliapin, I. and M. Ghil (2007) A differential delay model of ENSO variability: quantitative predictability and structural instability, *European Geosciences Union, General Assembly, Vienna, Austria, April 15-20*, EGU2007-A-10437, NH8.01/NP4.04-1MO1O-001.
11. Schoenberg, F., S. Kumar, I. Zaliapin, and Y. Kagan (2006) Statistical Modeling of Seismic Moment Release. *EOS Trans. AGU*, 87(52), Fall Meet. Suppl. Abstract S13A-0212.
12. Keilis-Borok, V., A. Soloviev, A. Gabrielov, and I. Zaliapin (2006) Universal Pre-Disaster Transformation of Frequency-Magnitude Relation. *EOS Trans. AGU*, 87(52), Fall Meet. Suppl. Abstract NG41A-05.
13. Zaliapin, I., V. Keilis-Borok, and A. Gabrielov (2006) Deviations from Scale-Invariance in Extreme Event Phenomena: A Theoretical Analysis. *EOS Trans. AGU*, 87(52), Fall Meet. Suppl. Abstract NG41A-07.
14. Zaliapin, I., S. Kumar, Y. Kagan, and F. Schoenberg (2006) Statistical Modeling of Seismic Moment Release and Moment Deficiency. *Southern California Earthquake Center (SCEC) 2006 Annual Meeting, September 10-13, Palm Springs, California*.
15. Ghil, M. and I. Zaliapin (2005) Nonlinear Dynamics, Poor Data, and What to Make of Them? *EOS Trans. AGU*, 86(52), Fall Meet. Suppl. Abstract NG22A-01. (Invited)
16. Shrestha, R. K., I. Zaliapin, B. Dodov, and E. Foufoula-Georgiou (2005) Scaling in Hydrologic Response and a Theoretical Basis for Derivation of Probabilistic Unit Hydrographs. *EOS Trans. AGU*, 86(52), Fall Meet. Suppl. Abstract H33E-1433.

17. Keilis-Borok, V. I., P. Shebalin, A. Gabrielov, and I. Zaliapin (2005) Reverse Tracing of Precursors: Ongoing Experiment in the Month-in-Advance Earthquake Prediction. *EOS Trans. AGU*, 86(52), Fall Meet. Suppl. Abstract NG21A-01. (Invited)
18. Zaliapin, I., Y. Kagan, and F. Schoenberg (2005) Estimation of Seismic Moment Release with Implications for Regional Hazard Assessment. *EOS Trans. AGU*, 86(52), Fall Meet. Suppl. Abstract S53B-1096.
19. Zaliapin, I., Y. Kagan, and F. Schoenberg (2005) Evaluating the Rate of Seismic Moment Release: A Curse of Heavy Tails. Southern California Earthquake Center (SCEC) 2005 Annual Meeting, September 11-14, Palm Springs, California.
20. Zaliapin, I., M. Ghil, V. Keilis-Borok, and A. Gabrielov (2005). Binary decomposition analysis (BDA) of a time series. *General Assembly of the European Geosciences Union, April 2005*. Abstract EGU05-A-05753 (Session NH9.09/NP4.06).
21. Zaliapin, I., H. Wong, and A. Gabrielov (2005) Inverse cascades and hierarchical aggregation in percolation model. *General Assembly of the European Geosciences Union, April 2005*. Abstract EGU05-A-05779 (Session NH9.09/NP4.06).
22. Zaliapin, I., I. Semenova, A. Kashina, and V. Rodionov. Multiscale Trend Analysis of Microtubule-Dependent Pigment Transport in Melanophores. (2004) *Proceedings of 44th Annual Meeting of the American Society for Cell Biology, December 4-8*.
23. Zaliapin, I., G. Molchan. (2004) Tossing the Earth: How to Reliably Test Earthquake Prediction Methods. *Eos. Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract S23A-0302, 2004.
24. Zaliapin, I., E. Foufoula-Georgiou, B. Dodov. (2004) Multiscale Trend Analysis of River Basin Dynamics. *Eos. Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract H33C-0476, 2004.
25. Gabrielov, A., I. Zaliapin, H. Wong (2004) Hierarchical Description of Evolution of an Inverse Cascade in Percolation Model. *Eos. Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract NG31A-0857.
26. Keilis-Borok, V., P. Shebalin, A. Gabrielov, D. Turcotte, I. Zaliapin, M. Ghil (2004) Short-Term Earthquake Prediction Based on the Reverse Tracing of Lithosphere Dynamics. *Eos. Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract NG22A-02 (Invited)
27. Zaliapin, I., A. Gabrielov, and V. Keilis-Borok. Multiscale Trend Analysis: A new tool for studying complex time series. 25-th IUGG Conference on Mathematical Geophysics, June 16-18, 2004, Columbia U, New York, NY, USA.
28. Zaliapin, I. Testing the earthquake prediction quality: statistical estimation vs. hypothesis testing approaches. SCEC/UGSG/CGS Workshop "Science of Earthquake Prediction", February 20, 2004, SCEC/USC. (Invited)
29. Zaliapin, I., Z. Liu, K. Aki, A. Jin, V. Keilis-Borok. Multiscale Trend Analysis of Temporal (Un)Correlations Between Coda Q and Seismicity in California. *Eos. Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract NG12C-07, 2003.
30. Keilis-Borok, V., P. Shebalin, A. Gabrielov, I. Zaliapin, S. Uyeda, T. Nagao. Short-term premonitory rise of earthquake correlation range. *Eos. Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract NG41C-0068, 2003.
31. Shebalin, P., V. Keilis-Borok, I. Zaliapin, S. Uyeda, T. Nagao, N. Tsybin. Short-term premonitory rise of earthquake correlation range. *Hagiwara Symposium, IUGG XXIII General Assembly*, June 30 – July 11, 2003, Sapporo, Japan.
32. Keilis-Borok, V., Shebalin, P., S. Uyeda, T. Nagao, I. Zaliapin, On the short-term earthquake prediction based on evolution of seismicity: theory; scaling; application to 27 large earthquakes in Japan and California. *Hagiwara Symposium, IUGG XXIII General Assembly*, June 30 – July 11, 2003, Sapporo, Japan.
33. Zaliapin, I., Keilis-Borok, V., Shebalin, P., Turcotte, D., Liu, Z., Zöller G. Premonitory long-range earthquake correlations. *EGS-AGU-EUG Joint Assembly*, April 7-11, 2003, Nice, France.

34. Zaliapin, I., Keilis-Borok, V., Shebalin, P., Turcotte, D., Liu, Z., Zöller, G. Premonitory long-range earthquake correlations. *EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract U72B-0023, 2002.
35. Gabrielov, A., Zaliapin, I., Keilis-Borok, V. Multiscale trend analysis: a new approach to studying complex time series. *EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract NG62B-0959, 2002.
36. Keilis-Borok, V., Shebalin, P., Zaliapin, I., Novikova, O., Gabrielov, A. On the short-term earthquake prediction: renormalization algorithm and observational evidence in S. California, E. Mediterranean, and Japan. *EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract NG52A-02, Invited. 2002.
37. Keilis-Borok, V., Gabrielov, A., Turcotte, D., Zaliapin, I. Cascade of clusters - from metaphor to algorithm? *EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract U62A-12, 2002.
38. Keilis-Borok, V., Gabrielov, A., Ghil, M., Newman, W., Zaliapin, I. Ensemble of premonitory seismicity patterns. *EOS Trans. AGU*, 82(47), Fall Meet. Suppl., Abstract NG12A-02, 2001.
39. Zaliapin, I., Axen, G., Gabrielov, A., Ghil, M., Keilis-Borok, V., Newman, W., Shebalin, P. Colliding Cascades and Boolean Delay Equations for Earthquake Prediction. *EOS Trans. AGU*, 82(47), Fall Meet. Suppl., Abstract NG21A-0418, 2001.
40. Zaliapin, I. Long-range correlations of seismicity prior to a strong earthquake. Simple model vs. complex observations. The IMA Annual Program "*Mathematics in the Geosciences*", September 2001 - June 2002, Institute for Mathematics and its Applications, University of Minnesota; Workshop 1: "*Spatio-temporal Patterns in the Geosciences*", September 24-29, 2001. (Invited)
41. Ghil, M., Keilis-Borok, V., and Zaliapin, I. A Boolean Delay Model of Colliding Cascades: Prediction and Seismic Regimes. Abstracts of IGPP Annual Meeting, May 7-8, University of California, Los Angeles, 2001, p.13.
42. Keilis-Borok, V., Zaliapin, I., Axen, G., Gabrielov, A., and Newman, W. Premonitory Redistribution of Seismicity Over the Fault Network in Southern California. Abstracts of IGPP Annual Meeting, May 7-8, University of California, Los Angeles, 2001, p. 9.
43. Keilis-Borok, V., Gabrielov, A., Zaliapin, I., Newman, W., Axen, G., and Shebalin P. Selforganization of Critical Transitions in the Colliding Cascades with Applications to Earthquake Prediction. Abstracts of AGU 2000 Fall Meeting. December 15-19, 2000. San Francisco, F556.
44. Zaliapin, I., Keilis-Borok, V., Axen, G., Gabrielov, A., and Newman, W. Premonitory Redistribution of Seismicity Over the Fault Network in Southern California. Abstracts of AGU 2000 Fall Meeting. December 15-19, 2000. San Francisco, F558.
45. Keilis-Borok, V., Zaliapin, I., Rotwain, I., Botwina, L., Gabrielov, A., Newman, W., and Shnirman, M. Premonitory Change of Scaling in Seismicity. Abstracts of AGU 2000 Fall Meeting. December 15-19, 2000. San Francisco, F587.
46. Zaliapin, I. V., Keilis-Borok, V. I., Shebalin, P. N., Gabrielov A. M., and Newman W. I. Increase of earthquake correlation range prior to the strong earthquakes. Abstracts of 23rd International Conference on Mathematical Geophysics. June 18-23, 2000. La Citadelle Villefranche sur Mer, France.