

# Iddo Isaac Eliazar\*

## Short Biography

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Iddo Eliazar is a graduate of Tel Aviv University: BSc Summa Cum Laude in *Mathematics and Statistics*; MSc Summa Cum Laude in *Operations Research*, under the supervision of Professor Uri Yechiali; PhD in *Applied Probability*, under the supervision of Professors Uri Yechiali and Robert Liptser.

Iddo held postdoctoral positions at Cambridge University and at the Technion, was a Section Head at the Department of Analytic Development of Bank Hapoalim (Israel's largest bank), and held faculty positions at Tel Aviv University and at Bar Ilan University. Iddo joined the Holon Institute of Technology in 2006, as an Associate Professor of Stochastics and Operations Research.

Iddo is the recipient of the BSc Nimrod Lapid prize (1992), the MSc Nimrod Lapid prize (1994), the PhD Wolf prize (1997), the PhD Blecher prize (1998), and the HIT award for excellence in research (2009, 2010, 2011, 2012). Iddo served as the Academic Secretary of the Israeli Operations Research Society (2006-2008), serves on the Advisory Panel of the Journal of Physics A (2013-2014), chaired one national conference, and co-chaired 8 international conferences and workshops.

Iddo's research focuses on *Stochastics*: The quantitative modeling and analysis of complex systems and processes incorporating a high level of randomness. Iddo published over 100 research papers in leading scientific journals, collaborated with world-renowned scientists, and his research was presented in dozens of international conferences and workshops.

Iddo's research is trans-disciplinary – amalgamating together mathematical, probabilistic, physical, and socioeconophysical perspectives, and spanning across the following topics: queueing systems; nonlinear shot-noise; growth-collapse and decay-surge evolutions; anomalous diffusion; Levy processes; Poisson modeling of random systems and processes; fractals and self-similarity; stochastic limit theorems; the universality and robustness of power-laws; wild fluctuations and the Noah effect; long-range dependence and the Joseph effect;  $1/f$  noise; the measurement of statistical evenness and heterogeneity; the classification of randomness; the econophysics of size distributions and rank distributions.

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# Iddo Isaac Eliazar\*

## Curriculum Vitae

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### Positions held

<b>Associate Professor</b> , Faculty of Technology Management, Holon Institute of Technology	<b>2006-</b>
<b>Senior Researcher</b> , Faculty of Exact Sciences, Tel Aviv University	<b>2005-2006</b>
<b>Lecturer</b> , Department of Mathematics, Bar Ilan University	<b>2003-2005</b>
<b>Visiting Lecturer</b> , Faculty of Management, Tel Aviv University	<b>2001-2003</b>
<b>Adjunct Lecturer</b> , School of Mathematical Sciences, Tel Aviv University	<b>1999-2001</b>
<b>Section Head</b> , Department of Analytic Development, Bank Hapoalim	<b>1999-2000</b>
<b>Lector in Statistics</b> , Jesus College, Cambridge University, UK	<b>1998-1999</b>
<b>Teaching Assistant</b> , School of Mathematical Sciences, Tel Aviv University	<b>1993-1998</b>

### Education

<b>Postdoctoral Fellow</b> , Faculty of Electrical Engineering, the Technion	<b>2000-2001</b>
<b>Postdoctoral Fellow</b> , the Statistical Laboratory, Cambridge University, UK	<b>1998-1999</b>
<b>PhD</b> in Probability Theory, Tel Aviv University Dissertation: "Limit Theorems for Random Jump Processes" Advisors: Prof. Uri Yechiali, Prof. Robert Liptser	<b>1995-1998</b>
<b>MSc</b> in Operations Research, <i>Summa Cum Laude</i> , Tel Aviv University Thesis: "Randomly Timed Gated Queueing Systems" Advisor: Prof. Uri Yechiali GPA: 99 (out of 100) Cited annually on the Dean's list	<b>1992-1994</b>
<b>BSc</b> in Mathematics & Statistics, <i>Summa Cum Laude</i> , Tel Aviv University GPA in Mathematics: 95 (out of 100) GPA in Statistics: 95 (out of 100) Cited annually on the Dean's list	<b>1989-1992</b>

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## Awards

<b>HIT award</b> for Excellence in Scientific Research	2012
<b>HIT award</b> for Excellence in Scientific Research	2011
<b>HIT award</b> for Excellence in Scientific Research	2010
<b>HIT award</b> for Excellence in Scientific Research	2009
<b>Blecher prize</b> for outstanding Ph.D. students	1998
<b>Wolf prize</b> for outstanding Ph.D. students	1997
<b>Nimrod Lapid prize</b> for outstanding M.Sc. students	1994
<b>Nimrod Lapid prize</b> for outstanding B.Sc. students	1992

## Professional activities

<b>Member</b> of the Advisory Panel, <i>Journal of Physics A: Mathematical and Theoretical</i>	2013-2014
<b>Co-Organizer</b> of an Invited Session on <i>Queueing Systems</i> in the 2013 EURO-INFORMS Joint International Meeting, July 1-4, Rome, Italy	2013
<b>Co- Chair</b> of the International Workshop <i>Search and Exploration</i> , June 3-7, Cargese, Corsica, France	2013
<b>Co- Chair</b> of the International Workshop <i>Fluctuations in Small Complex Systems</i> , October 21-25, Venice, Italy	2012
<b>Co-Chair</b> of the International IWAP 2012 Conference on Applied Probability, June 11-14, Jerusalem, Israel	2012
<b>Member</b> of the International Advisory Committee of the International Workshop <i>Search and Stochastic Phenomena in Complex Physical and Biological Systems</i> , May 28 – June 1, Palma de Mallorca, Spain	2012
<b>Organizer</b> of an Invited Session on <i>Queueing Theory and its Applications</i> in the 2012 Annual Meeting of the Israeli Operations Research Society, June 3-4, Ma'ale Hakhamisha, Israel	2012
<b>Lecturer</b> of a course on <i>Fractal Statistics</i> in the International Jyvaskyla Summer School, August 8-19, University of Jyvaskyla, Finland	2011
<b>Organizer</b> of a Mini Cluster of three Invited Sessions on <i>Anomalous Diffusion</i> , and Member of the International Advisory Committee, in the International SigmaPhi11 Conference on Statistical Physics, July 11-15, Larnaca, Cyprus	2011

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- Organizer** of an Invited Session on *Stochastic Models* in the 2011 Annual Meeting of the Israeli Operations Research Society, May 29-30, Acre, Israel **2011**
- Co- Chair** of the International Workshop *Search and Exploration*, April 25-30, Cargese, Corsica, France **2011**
- Organizer** of two Invited Sessions on *Advances in Anomalous Diffusion* in the International INFORMS 2010 Conference, November 7-10, Austin, Texas **2010**
- Organizer** of an Invited Session on *Statistics of Complex Systems* in the International IWAP 2010 Conference on Applied Probability, July 5-8, Madrid, Spain **2010**
- Co- Chair** of the International Workshop *Anomalous diffusion: Theory and Applications*, November 13-14, Wroclaw, Poland **2009**
- Co-Chair** of WITOR 2009 – a joint Workshop of the Israeli and Turkish Operations Research national societies, September 6-8, Istanbul, Turkey **2009**
- Secretary** of ORSIS – the Israeli Operations Research Society **2006-2008**
- Organizer** of two Invited Sessions on *Stochastic Modeling in Physics* in the International VALUTOOLS 2008 Conference, October 20-24, Athens, Greece **2008**
- Co-Chair** of the International Conference *Modeling Anomalous Diffusion and Relaxation: From Single Molecules to the Flight of the Albatross*, March 23-28, the Institute for Advanced Studies, Jerusalem, Israel **2008**
- Co-Editor** of a Special Issue of the journal *Probability in the Engineering and the Informational Sciences*, in honor of Prof. Uri Yechiali's retirement **2008**
- Co-Chair** of the International Workshop *Networks Queues Performance and Stochastic Modeling*, May 17-19, Shefayim, Israel **2006**
- Chair** of the 2005 Annual Meeting of the Israeli Operations Research Society, May 29-30, Caesarea, Israel **2005**

## PhD students

- Shlomi Reuveni**, co-supervised with Prof. Uri Yechiali, School of Mathematical Sciences, Tel Aviv University **2010-**
- Winner of the 2011 **Blecher prize** for outstanding Ph.D. students
  - Winner of the 2011 **McDonnell Foundation** postdoctoral fellowship

## Teaching experience

Undergraduate and graduate courses in the following fields:

- Operations Research / Operations Management
- Financial Mathematics / Financial Engineering
- Probability Theory & Stochastic Processes
- Stochastic Modeling

## Research interest

**Stochastic Modeling and Analysis:** The quantitative modeling and the mathematical analysis of complex systems and processes incorporating a high level of randomness – be they physical, chemical, biological, socioeconomic, financial, or engineered

## Conference Talks\*

1. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity*. MECO33, the 33rd Conference of the Middle European Cooperation in Statistical Physics, 14-16 April 2008, Puchberg, Wels, Austria.
2. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity*. International Workshop on Recent Developments in Financial Mathematics and Stochastic Calculus, 25-26 April 2008, METU, Ankara, Turkey.
3. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity*. The Annual Meeting of the Israeli Operations Research Society, 18-19 May 2008, Shefayim, Israel.
4. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity*. EURO Working Group on Stochastic Modeling, 23-25 June 2008, Koc University, Istanbul, Turkey.
5. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity* (invited). The 21st International Marian Smoluchowski Symposium, 13-18 September 2008, Zakopane, Poland.
6. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations, and the phenomena of Paretian ubiquity* (invited). The International VALUETOOLS 2008 Conference, 20-24 October 2008, Athens, Greece.
7. I. Eliazar, J. Klafter, *Statistical resilience of random populations to random perturbations* (invited). The Annual Meeting of the Israeli Operations Research Society, 10-11 May 2009, Herzelia, Israel.

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\* Updated since 2008; underscoring indicates presenting author.

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8. I. Eliazar, J. Klafter, *Statistical resilience of random populations to random perturbations* (invited). International Workshop on Queueing and Stochastic Systems, 3-4 June 2009, Haifa, Israel.
  9. I. Eliazar, J. Klafter, *Statistical resilience of random populations to random perturbations* (invited). Joint bi-national Meeting of the Israeli and Turkish Operations Research Societies, 6-9 September 2009, Istanbul, Turkey.
  10. I. Eliazar, J. Klafter, *Universal generation of fractal statistics* (invited). International Conference on Anomalous diffusion: Theory and Applications, 13-14 November 2009, Wroclaw, Poland.
  11. I. Eliazar, I. Sokolov, *A sex talk: The matchmaking paradox*. The Annual Meeting of the Israeli Operations Research Society, 2-3 June 2010, Nir Etzion, Israel.
  12. I. Eliazar, J. Klafter, *Universal generation of fractal statistics*. International Conference on Applied Mathematics, 7-11 June 2010, Hong Kong.
  13. I. Eliazar, J. Klafter, *Universal generation of fractal statistics: Data-traffic, queues and physics*. The International Madrid Conference on Queueing Theory, 28 June – 1 July 2010, Toledo, Spain.
  14. I. Eliazar, J. Klafter, *Universal generation of fractal statistics* (invited). The International IWAP 2010 Conference on Applied Probability, 5-8 July 2010, Madrid, Spain.
  15. I. Eliazar, I. Sokolov, *A sex talk: The matchmaking paradox*. The International IWAP 2010 Conference on Applied Probability, 5-8 July 2010, Madrid, Spain.
  16. I. Eliazar, J. Klafter, *Universal generation of fractal statistics* (invited). The 2010 European Meeting of Statisticians, 17-22 August 2010, Piraeus, Greece.
  17. I.M. Sokolov, I. Eliazar, *Sampling from scale-free networks and the matchmaking paradox* (plenary). International Conference on Models in Population Dynamics and Ecology, 1-3 September 2010, Leicester, England.
  18. I. Eliazar, J. Klafter, *Universal generation of fractal statistics: Data-traffic, queues and physics* (invited). The second bi-national Israeli-Dutch Workshop on Queueing Theory, 29 September – 1 October 2010, Eindhoven, the Netherlands.
  19. I. Eliazar, J. Klafter, *Universal generation of fractal statistics* (invited). The International INFORMS 2010 Conference, 7-10 November 2010, Austin, Texas.
  20. I. Eliazar, I. Sokolov, *A sex talk: The matchmaking paradox* (invited). The International INFORMS 2010 Conference, 7-10 November 2010, Austin, Texas.

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21. S. Reuveni, I. Eliazar, U. Yechiali, *The totally asymmetric inclusion process, or tandem network queues with batch service* (invited). International Eurandom Workshop on Stochastic Models, 7 April 2011, Eindhoven, the Netherlands.
  22. I. Eliazar, J. Klafter, *Universal control of search swarms* (invited). International Workshop on Search and Exploration, 25-30 April 2011, Cargese, Corsica, France.
  23. I. Eliazar, J. Klafter, *Anomalous is Ubiquitous* (plenary). The International VALUETOOLS 2011 Conference, 16-20 May 2011, Paris, France.
  24. I. Eliazar, J. Klafter, *Universal control of search swarms* (invited). The Annual Meeting of the Israeli Operations Research Society, 29-30 May 2011, Acre, Israel.
  25. S. Reuveni, I. Eliazar, U. Yechiali, *Tandem Queues with Batch Service* (invited). The Annual Meeting of the Israeli Operations Research Society, 29-30 May 2011, Acre, Israel.
  26. I. Eliazar, J. Klafter, *Universal statistics and control of random transport processes* (invited). The International SigmaPhi11 Conference on Statistical Physics, 11-15 July 2011, Larnaca, Cyprus, Greece.
  27. I. Eliazar, J. Klafter, *Randomized central limit theorems* (invited). The International SigmaPhi11 Conference on Statistical Physics, 11-15 July 2011, Larnaca, Cyprus, Greece.
  28. S. Reuveni, I. Eliazar, U. Yechiali, *Tandem Queues with Batch Service*. The International IFIP 2011 Performance Conference, 18-20 October 2011, Amsterdam, the Netherlands.
  29. I. Eliazar, J. Klafter, *Anomalous is Ubiquitous* (invited). International Workshop on Aggregation, Inference and Rare Events in the Natural and Socio-Economic Sciences, 17-18 May 2012, Warwick, England.
  30. I. Eliazar, J. Klafter, *Randomized central limit theorems* (invited). International Workshop on Search and Stochastic Phenomena in Complex Physical and Biological Systems, 28 May – 1 June 2012, Palma de Mallorca, Spain.
  31. S. Reuveni, I. Eliazar, U. Yechiali, *The asymmetric inclusion process: A showcase of complexity* (invited). The Annual Meeting of the Israeli Operations Research Society, 3-4 June 2012, Ma'ale Hakhamisha, Israel.
  32. S. Reuveni, I. Eliazar, U. Yechiali, *Limit laws in the asymmetric inclusion process* (invited). The Annual Meeting of the Israeli Operations Research Society, 3-4 June 2012, Ma'ale Hakhamisha, Israel.

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33. I. Eliazar, M. Cohen, *The universal macroscopic statistics and phase transitions of rank distributions* (invited). International Workshop on Optimization Scheduling and Queues, 6-8 June 2012, Haifa, Israel.
  34. I. Eliazar, J. Klafter, *Randomized central limit theorems* (invited). The International IWAP 2012 Conference on Applied Probability, 11-14 June 2012, Jerusalem, Israel.
  35. S. Reuveni, I. Eliazar, U. Yechiali, *The asymmetric inclusion process* (invited). The International IWAP 2012 Conference on Applied Probability, 11-14 June 2012, Jerusalem, Israel.
  36. S. Reuveni, I. Eliazar, U. Yechiali, *The asymmetric inclusion process: Complexity and limit laws* (invited). The International IWAP 2012 Conference on Applied Probability, 11-14 June 2012, Jerusalem, Israel.
  37. S. Reuveni, I. Eliazar, U. Yechiali, *The asymmetric inclusion process* (invited). Weizmann Institute Statistical Mechanics Day V, 25 June 2012, Rehovot, Israel.
  38. I. Eliazar, J. Klafter, *Anomalous is ubiquitous* (invited). The 4-th International Conference on Statistical Physics: Modern Trends and Applications, 3-6 July 2012, Lviv, Ukraine.
  39. S. Reuveni, I. Eliazar, U. Yechiali, *Occupation probabilities in the Asymmetric Inclusion Process* (invited). Young European Queueing Theorists workshop on analytic methods in queueing systems, 1-3 November 2012, Eindhoven, The Netherlands.
  40. I. Eliazar, *Stationarity revisited* (invited). International Workshop on Fluctuations in Small Complex Systems, 21-24 October 2012, Venice, Italy.
  41. I. Eliazar, M. Cohen, *The econophysics of wealth* (invited). Sloan Foundation workshop on Finance and Risk Engineering, 22 April – 2 May, 2013, Polytechnic Institute of New York University, New York.
  42. I. Eliazar, M. Cohen, *The econophysics of size* (invited). Sloan Foundation workshop on Finance and Risk Engineering, 22 April – 2 May, 2013, Polytechnic Institute of New York University, New York.
  43. I. Eliazar, M. Cohen, *The econophysics of wealth* (invited tutorial). The Annual Meeting of the Israeli Operations Research Society, 19-20 May 2013, Be'er Sheva, Israel.
  44. I. Eliazar, M. Cohen, *The econophysics of size* (Ising Lecture). The Lviv Annual Workshop on Phase Transitions and Critical Phenomena, 28-30 May 2013, Lviv, Ukraine.
  45. I. Eliazar, M. Cohen, *A Langevin approach to the distribution of wealth* (invited). DCP-PhysBio Steering Committee Meeting, 28-30 May 2013, Lviv, Ukraine.



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46. I. Eliazar, *Benford's law: A Poisson perspective* (invited). International Workshop on Search and Exploration, 3-7 June 2013, Cargese, Corsica, France.
  47. S. Reuveni, I. Eliazar, U. Yechiali, *The asymmetric inclusion process: A showcase of complexity* (invited). EURO-INFORMS Joint International Meeting, 1-4 July 2013, Rome, Italy.
  48. S. Reuveni, I. Eliazar, U. Yechiali, *Occupation probabilities and Catalan numbers in the asymmetric inclusion process* (invited). EURO-INFORMS Joint International Meeting, 1-4 July 2013, Rome, Italy.

## **Refereed publications**

1. I. Eliazar, U. Yechiali, *Polling under the randomly-timed gated regime*, Stochastic Models 14 (1998) 79-93.
2. I. Eliazar, U. Yechiali, *Randomly-timed gated queueing systems*, SIAM Journal on Applied Mathematics 59 (1998) 423-441.
3. I. Eliazar, G. Fibich, U. Yechiali, *A communication multiplexer problem: Two alternating queues with dependent randomly-timed gated regime*, Queueing Systems 42 (2002) 325-353.
4. I. Eliazar, J. Klafter, *Lévy-driven Langevin systems: Targeted stochasticity*, Journal of Statistical Physics 111 (2003) 739-768.
5. I. Eliazar, J. Klafter, *On the extreme jumps of one-sided Lévy processes*, Physica A 330 (2003) 8-17; (full version in cond-mat 0307308).
6. I. Eliazar, *The snowblower problem*, Queueing Systems 45 (2003) 357-380.
7. I. Eliazar, *Doubling an investment*, Physica A 331 (2004) 240-252.
8. I. Eliazar, J. Klafter, *Spatial gliding, temporal trapping, and anomalous transport*, Physica D 187 (2004) 30-50.
9. I. Eliazar, J. Klafter, *A growth-collapse model: Lévy inflow, geometric crashes, and generalized Ornstein-Uhlenbeck dynamics*, Physica A 334 (2004) 1-21.
10. I. Eliazar, J. Klafter, *On the first passage of one-sided Lévy motions*, Physica A 336 (2004) 219-244.
11. I. Eliazar, *Gated polling systems with Lévy inflow and inter-dependent switchover times: A dynamical-systems approach*, Queueing Systems 49 (2005) 49-72.
12. I. Eliazar, J. Klafter, *Stochastic Ornstein-Uhlenbeck capacitors*, Journal of Statistical Physics 118 (2005) 177-198.
13. I. Eliazar, *On geometric record times*, Physica A 348 (2005) 181-198.

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14. I. Eliazar, *Extremes: A continuous-time perspective*, Probability in the Engineering and the Informational Sciences 19 (2005) 289-308.
  15. I. Eliazar, J. Klafter, *Lévy, Ornstein-Uhlenbeck, and subordination: Spectral vs jump description*, Journal of Statistical Physics 119 (2005) 165-196.
  16. I. Eliazar, *On selfsimilar Lévy random probabilities*, Physica A 356 (2005) 207-240.
  17. I. Eliazar, *From polling to snowplowing*, Queueing Systems 51 (2005) 115-133.
  18. I. Eliazar, J. Klafter, *On the nonlinear modeling of shot noise*, Proceedings of the National Academy of Sciences (USA) 102 (2005) 13779-13782.
  19. I. Eliazar, J. Klafter, *Anomalous pulsation*, Journal of Statistical Physics 120 (2005) 587-626.
  20. I. Eliazar, J. Klafter, *Nonlinear shot noise: Lévy, Noah & Joseph*, Physica A 360 (2006) 227-260.
  21. I. Eliazar, J. Klafter, *Diffusers, potential slides, and surmountability*, Physica A 361 (2006) 373-393.
  22. I. Eliazar, J. Klafter, *On the active periods of nonlinear shot noise*, Physica A 363 (2006) 237-259.
  23. I. Eliazar, J. Klafter, *Nonlinear shot noise, memory systems, and all-time hit parades*, Physica A 366 (2006) 281-298.
  24. I. Eliazar, J. Klafter, *Growth-collapse and decay-surge evolutions, and geometric Langevin equations*, Physica A 367 (2006) 106-128.
  25. I. Eliazar, T. Koren, J. Klafter, *Searching circular DNA strands*, Journal of Physics C: Condensed Matter 19 (2007) 065140 (27pp).
  26. I. Eliazar, J. Klafter, *Correlation cascades of Lévy-driven random processes*, Physica A 376 (2007) 1-26.
  27. I. Eliazar, *The M/G/ $\infty$  queue revisited: Finiteness, summability, long-range dependence, and reverse engineering*, Queueing Systems 55 (2007) 71-82.
  28. I. Eliazar, J. Klafter, *Temporal generation of power-law distributions: A universal 'oligarchy mechanism'*, Physica A 377 (2007) 53-57.
  29. I. Eliazar, J. Klafter, *Shot noise displaying simultaneously the Noah and Joseph effects*, Physical Review E 75 (2007) 031108 (10pp).
  30. I. Eliazar, J. Klafter, *Fractal Lévy correlation cascades*, Journal of Physics A: Mathematical and Theoretical 40 (2007) F307-F314 (Fast Track Communication).

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31. I. Eliazar, J. Klafter, *Nonlinear shot noise: From aggregate dynamics to maximal dynamics*, Europhysics Letters 78 (2007) 40001 (6pp).
  32. I. Eliazar, J. Klafter, *Scale-invariance of random populations: From Paretian to Poissonian fractality*, Physica A 383 (2007) 171-189.
  33. I. Eliazar, *Lorenzian analysis of infinite Poissonian populations and the phenomena of Paretian ubiquity*, Physica A 386 (2007) 318-334.
  34. I. Eliazar, *Shot noise with random relaxations*, Physical Review E 76 (2007) 041128 (10pp).
  35. I. Eliazar, U. Yechiali, *Monitoring of stochastic particle systems: Analysis and optimization*, Stochastic Models 24 (2008) 1-18.
  36. I. Eliazar, T. Koren, J. Klafter, *Parallel search of long circular strands: Modeling, analysis, and optimization*, Journal of Physical Chemistry B 112 (2008) 5905-5909.
  37. I. Eliazar, *On the discrete-time  $G/GI/\infty$  queue*, Probability in the Engineering and the Informational Sciences 22 (2008) 557-585.
  38. I. Eliazar, J. Klafter, *Paretian Poisson processes*, Journal of Statistical Physics 131 (2008) 487-504.
  39. I. Eliazar, J. Klafter, *Markov-breaking and the emergence of long memory in Ornstein-Uhlenbeck systems*, Journal of Physics A: Mathematical and Theoretical 41 (2008) 122001 (Fast Track Communication; 8pp).
  40. I. Eliazar, *Spectral analysis of source-medium-sink flows*, Europhysics Letters 82 (2008) 30005 (4pp).
  41. I. Eliazar, *Intrinsic fractality of classic shot noise*, Physical Review E 77 (2008) 061103 (5pp).
  42. I. Eliazar, J. Klafter, *Fractal probability laws*, Physical Review E 77 (2008) 061125 (6pp).
  43. I. Eliazar, J. Klafter, *Fractal Poisson processes*, Physica A 387 (2008) 4985-4996.
  44. I. Eliazar, J. Klafter, *The oligarchic structure of Paretian Poisson processes*, Europhysics Letters 83 (2008) 40004 (4pp).
  45. I. Eliazar, J. Klafter, *Statistical resilience of random populations to random perturbations*, Physical Review E 79 (2009) 011103 (9pp).
  46. I. Eliazar, J. Klafter, *Power-Law Distributions: Beyond Paretian Fractality*, Risk and Decisions Analysis 1 (2009) 155-170.
  47. I. Eliazar, J. Klafter, *The maximal process of nonlinear shot noise*, Physica A 388 (2009) 1755-1779.

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48. I. Eliazar, J. Klafter, *From Ornstein-Uhlenbeck dynamics to long-memory processes and fractional Brownian motion*, Physical Review E 79 (2009) 021115 (15pp).
  49. I. Eliazar, J. Klafter, *A unified and universal explanation for Lévy laws and 1/f noises*, Proceedings of the National Academy of Sciences (USA) 106 (2009) 12251-12254.
  50. I. Eliazar, J. Klafter, *Universal generation of statistical self-similarity: A randomized Central Limit Theorem*, Physical Review Letters 103 (2009) 040602 (4pp).
  51. Y. Meroz, I. Eliazar, J. Klafter, *Facilitated diffusion in a crowded environment: from kinetics to stochastics*, Journal of Physics A: Mathematical and Theoretical 42 (2009) 434012 (9pp).
  52. I. Eliazar, J. Klafter, *On the generation of anomalous diffusion*, Journal of Physics A: Mathematical and Theoretical 42 (2009) 472003 (Fast Track Communication; 7pp).
  53. I. Eliazar, J. Klafter, *Record events in growing populations: universality, correlation and aging*, Physical Review E 80 (2009) 061117 (7pp).
  54. I. Eliazar, I.M. Sokolov, *Measuring statistical heterogeneity: The Pietra index*, Physica A 389 (2010) 117-125.
  55. I. Eliazar, *The extremal independence problem*, Physica A 389 (2010) 659-666.
  56. I. Eliazar, J. Klafter, *A Randomized Central Limit Theorem*, Chemical Physics 370 (2010) 290-293.
  57. I. Eliazar, I.M. Sokolov, *The matchmaking paradox: A statistical explanation*, Journal of Physics A: Mathematical and Theoretical 43 (2010) 055001 (12pp).
  58. I. Eliazar, I.M. Sokolov, *Diversity of Poissonian populations*, Physical Review E 81 (2010) 011122 (11pp).
  59. I.M. Sokolov, I. Eliazar, *Sampling from scale-free networks and the matchmaking paradox*, Physical Review E 81 (2010) 026107 (6pp).
  60. I. Eliazar, J. Klafter, *Ultra diffusions*, Journal of Physics A: Mathematical and Theoretical 43 (2010) 132002 (Fast Track Communication; 8pp).
  61. I. Eliazar, I.M. Sokolov, *Maximization of statistical heterogeneity: From Shannon's entropy to Gini's index*, Physica A 389 (2010) 3023-3038.
  62. I. Eliazar, J. Klafter, *Universal self-similarity of propagating populations*, Physical Review E 82 (2010) 011112 (8pp).
  63. I. Eliazar, I.M. Sokolov, *Gini characterization of extreme-value statistics*, Physica A 389 (2010) 4462-4472.

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64. I. Eliazar, J. Klafter, *Universal generation of 1/f noises*, Physical Review E 82 (2010) 021109 (8pp).
  65. I. Eliazar, J. Klafter, *Randomized central limit theorems: A unified approach*, Physical Review E 82 (2010) 021122 (15pp).
  66. I. Eliazar, *The Pietra term structures of financial assets*, Physica A 390 (2011) 699-706.
  67. I. Eliazar, *Randomness, evenness, and Rényi's index*, Physica A 390 (2011) 1982-1990.
  68. I. Eliazar, *Limit laws for Zipf's law*, Journal of Physics A: Mathematical and Theoretical 44 (2011) 022001 (Fast Track Communication; 6pp).
  69. I. Eliazar, J. Klafter, *Universal statistics and control of random transport processes*, Journal of Physics A: Mathematical and Theoretical 44 (2011) 222001 (Fast Track Communication; 8pp).
  70. I. Eliazar, *The growth-statistics of Zipfian ensembles: Beyond Heaps' law*, Physica A 390 (2011) 3189-3203.
  71. I. Eliazar, M.H. Cohen, *The universal macroscopic statistics and phase transitions of rank distributions*, Physica A 390 (2011) 4293-4303.
  72. I. Eliazar, J. Klafter, *Anomalous is ubiquitous*, Annals of Physics 326 (2011) 2517-2531.
  73. I. Eliazar, J. Klafter, *On the generation of anomalous and ultraslow diffusion processes*, Journal of Physics A: Mathematical and Theoretical 44 (2011) 405006 (13pp).
  74. I. Eliazar, J. Klafter, *On the generation of log-Lévy distributions and extreme randomness*, Journal of Physics A: Mathematical and Theoretical 44 (2011) 415003 (13pp).
  75. S. Reuveni, I. Eliazar, U. Yechiali, *Asymmetric inclusion process*, Physical Review E 84 (2011) 041101 (16pp).
  76. I. Eliazar, *Langevin dynamics, entropic crowding, and stochastic cloaking*, Physical Review E 84 (2011) 061132 (7pp).
  77. I. Eliazar, I.M. Sokolov, *Measuring statistical evenness: A panoramic overview*, Physica A 391 (2012) 1323-1353.
  78. I. Eliazar, M.F. Shlesinger, *Stochastic flow cascades*, Journal of Statistical Physics 146 (2012) 1-24.
  79. I. Eliazar, O. Benichou, *On the invariance of spatially inhomogeneous relaxation processes*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 015003 (12pp).
  80. I. Eliazar, J. Klafter, *A probabilistic walk up power laws*, Physics Reports 511 (2012) 143-175.

- 
81. I. Eliazar, I.M. Sokolov, *On the fractal characterization of Paretian Poisson processes*, Physica A 391 (2012) 3043-3053.
  82. I. Eliazar, M.F. Shlesinger, *Langevin unification of fractional motions*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 162002 (Fast Track Communication; 9pp).
  83. I. Eliazar, M.H. Cohen, *A Langevin approach to the Log-Gauss-Pareto composite statistical structure*, Physica A 391 (2012) 5598-5610.
  84. S. Reuveni, I. Eliazar, U. Yechiali, *Asymmetric inclusion process as a showcase of complexity*, Physical Review Letters 109 (2012) 020603 (4pp).
  85. I. Eliazar, *Describing the indescribable: The stationary structures of transient Markovian dynamics*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 282001 (Fast Track Communication; 7pp).
  86. I. Eliazar, M.H. Cohen, *The misconception of mean-reversion*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 332001 (Fast Track Communication; 14pp).
  87. I. Eliazar, *Statistical universality and the method of Poissonian randomizations*, Eur. Phys. J. Special Topics 216 (2013) 3-20.
  88. I. Eliazar, M.H. Cohen, *From shape to randomness: A classification of Langevin stochasticity*, Physica A 392 (2013) 27-42.
  89. I. Eliazar, *Geometric theory for Weibull's distribution*, Physical Review E 86 (2012) 031103.
  90. I. Eliazar, G. Oshanin, *On the structure and phase transitions of power-law Poissonian ensembles*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 405003 (16pp).
  91. I. Eliazar, *Super-stable Poissonian structures*, Journal of Physics A: Mathematical and Theoretical 45 (2012) 415103 (16pp).
  92. I. Eliazar, *Poissonian steady states: From stationary densities to stationary intensities*, Physical Review E 86 (2012) 041140 (20pp).
  93. M.H. Cohen, I. Eliazar, *Econophysical visualization of Adam Smith's invisible hand*, Physica A 392 (2013) 813-823.
  94. I. Eliazar, R. Metzler, *The RARE model: A generalized approach to random relaxation processes in disordered systems*, Journal of Chemical Physics 137 (2012) 234106 (9pp)
  95. S. Reuveni, I. Eliazar, U. Yechiali, *Limit laws for the asymmetric inclusion process*, Physical Review E 86 (2012) 061133 (17pp).
  96. I. Eliazar, M.F. Shlesinger, *Fractional motions*, Physics Reports (2013). DOI: 10.1016/j.physrep.2013.01.004

97. I. Eliazar, M.H. Cohen, *Assessing the inherent uncertainty of diffusion processes*, Physical Review E 87 (2013) 012126 (8pp).
98. I. Eliazar, M.H. Cohen, *Power-law connections: from Zipf to Heaps and beyond*, Annals of Physics 332 (2012) 56-74.
99. I. Eliazar, *Brownian gas models for extreme-value laws*, Journal of Physics A: Mathematical and Theoretical 46 (2013) 095003.
100. I. Eliazar, R. Metzler, *Anomalous statistics of random relaxations in random environments*, Physical Review E 87 (2013) 022141.
101. I. Eliazar, M.H. Cohen, *On the physical interpretation of statistical data from black-box systems*, Physica A 392 (2013) 2924-2939.
102. I. Eliazar, *Benford's Law: A Poisson Perspective*, Physica A (2013) in press.