Curriculum vitae

Name: Néda **Surname:** Zoltán
Position: Professor of Theoretical Physics

Professional address: Babes-Bolyai Univ., Dept. of Theoretical and Computational Physics
str. Kogalniceanu 1, RO-400084, Cluj-Napoca

Date and place of birth: 14 APR 1964, Cluj-Napoca

Citizenship: romanian **Marital status:** married, two daughters

Education:

Institution	Period	Diplomas
Babes-Bolyai University	Sept. 1983-Jun. 1987	Bachelor of Science
Bucharest University	Sept. 1987- Jun. 1988	Masters, Specialization in Polymer Physics
Babes-Bolyai University	Sept. 1990- Oct. 1994	PhD in Physics

Scientific title: Doctor in Physics (1994)

Elected external member of the Hungarian Academy of Sciences since 2007

Conducator doctorat din anul: 2003 (ordinul MEC: 4110/05.06.2003)

Professional experience:

Institution	Period	Position	Description
IRNE-Pitesti, Mioveni, Romania	Aug.1988-Sept.1990	physicist	Numerical calculations and simulations in physics
Babes-Bolyai University, Cluj, Romania	Ian. 1991-present	Assistant, Associate and full Professor	Lecturing and research. Supervising PhD students
INPG/ENSEEG-LTPCM, Grenoble, France	Ian. 1996-Ian.1997	Post-doc	Research in statistical and computational physics
Academia Sinica, Inst. of Physics, Taipei, Taiwan	Feb.1998-March 1999	Post-doc	Research in statistical and computational physics
Notre-Dame University, Notre-Dame, SUA	Aug. 2000-Mai 2001, and Aug. 2003- Ian. 2004	Visiting professor	Teaching, supervising and research in complex systems

Other international specializations:

- Tempus bursary in Complex Systems (Naples, Italy); Computational Physics Program coordination and fellowship (Bergen, Norway); Fellowship in Theoretical and Statistical Physics (Collegium Budapest, Institute for Advanced Studies, Budapest, Hungary); University of Porto - NATO Science Fellowship, Portugal;

invited researcher and professor: Northeastern University, USA (2014), Los Alamos National Laboratory (2010), Goethe Universitet, Frankfurt, Germany (2015) , Eotvos Lorand University, Budapest, Hungary (2011, 2012, 2014,2016), Academia Sinica Taipei, Taiwan (2003), North Eastern University Boston, USA (2014)

Foreign languages: English (excellent), French (good), Hungarian (native), Romanian (native)

Research competence: statistical and computational physics applied in interdisciplinary problems and problems from material sciences and nonlinear phenomena

Publication and Citation indexes

- published ISI papers: **106** ; BDI scientific papers: **20** ; science popularization: **10**; books: **5**
  total number of ISI citations: **3218**
- total number of independent ISI citations**: 3047**
- total number of Google Scholar citations: **6562**
- Hirsch index: **20 (ISI), 20 (Scopus), 28 (Google Scholar)**

Address of the researcherid.com profile: http://www.researcherid.com/rid/C-3754-2011

Major awards and honors:

- elected fellow of Collegium Budapest-Institute of Advanced Studies, Budapest, Hungary
- Bolyai prize (as supervisor) in junior category with student M. Ercsey-Ravasz in 2003 (Hungary)
- the Romanian Academy Prize, "Ştefan Procopiu" in 2004
- elected external member of the Hungarian Academy of Sciences in 2007
- NATO science senior fellowship (Porto, Portugal)
- Master of the Transylvanian Science (Cluj, offered by Academy of Hungary, Cluj Branch, 2013)
- Excelllence in Teaching prize (Budapest, offered by the Hungarian Students Committee in Hungary, 2013)
- Scientific Excellency Bursary from Hungary (2014-2015)
- President of the Transylvanian branch of the Hungarian Academy of Science (2017-)

Echoes about the research results in: New York Times, BBC Science News, Discovery Channel, Die Welt, Fe Figaro, Népszabadság. South Bend Tribune, Duna TV, Monitorul de Cluj, Transindex, Szabadsag, Radio Cluj, TVR Cluj, Adevarul, etc.

regular referee for: Phys. Rev. Lett., Phys. Rev. E şi B, Physica A şi D, Europhys. Lett. , Chaos, Scientific Reports, Regional Statistics, Royal Society Open Science, Plos One, etc.

principal organizer for the following international conferences: [1]. Bolyai-Gauss-Lobachevsky, 7-th International Conference on Differential Geometry and its Applications, Cluj-Napoca, Romania 2010 (http://bgl.math.ubbcluj.ro) [2] Stochastic Phenomena (Cluj, June, 2008) (http://www.summerschools.ro) [3] Complex Systems and Networks, Sovata, 2007, Romania (http://www.summerschools.ro), [4] BGL 15, 2010, Cluj-Napoca, Romania, [5] MACS 12, 2018, Cluj-Napoca, Romania (http://www.cs.ubbcluj.ro/~macs/2018/)

Director for national/international programs/projects: director for 6 national research projects (IDEI, CNCSIS grants, KPI/Sapientia grants); Institute responsible for 3 national projects (Complex IDEI, Parteneriat); director for 2 international projects (Bergen Computational Physics Lab, Brancusi program); coordinator for the POSDRU/post-doc programs at UBB: Studies and control of complex systems;

Invited plenary talks at international conferences: > 20

Supervised PhD thesis with defense year:

1. Dynamics in social systems: a computational physics approach (Varga Levente) 2019
2. Collective behavior and spatio-temporal pattern formation in Dynamical Systems (Larisa Davidova) 2018
3. A depinning approach to amorphous plasticity and dewetting (Tyukodi Botond) 2016
4. Continuous-Time Dynamical Systems for Solving Constraint Satisfaction Problems (Molnar Botond) 2016
5. Nem-hagyományos értelemben vett modern fizika a középiskolában (Non-traditional way of teaching modern physics, Klara Baranyai) 2015
6. Stochastic simulations with applications in Material Sciences (Deak Robert) 2014
7. Order-Disorder Transitions in Coupled Oscillator Systems (Boda Szilard) 2013
8. Computational and analytical modelling of astrophysically important stochastic processes (Gabriela Raluca Mocanu) 2013
9. Statistical Physics Studies of Complex Systems (Horvat Szabolcs) 2012
10. Statistical Physics Approach to Complex Social Systems (Derzsy Noemi) 2012
11. Statistical physics models for biological and sociological phenomena (Derzsi Aranka) 2012
12. Analitical and Computational study of social and biological collective phenomena (Kaptalan Erna Katalin) 2011
13. Theoretical and Experimental Study of Phase Transitions in Complex Systems (Sumi Robert-Zoltan) 2009
14. Applications of Celllular Neural/Nonlinear Networks in Physics (Ravasz I. Maria-Magdona) 2008
15. The Study of Magnetization Phenomena Using Monte Carlo Methods (Katalin Kovacs) 2007

PUBLICATIONS

ISI publications

1. T.S. Biro. A. Telcs and **Z. Neda**, *Entropic divergence and Entropy Related to Nonlinear Master Equations*, **Entropy,** vol. 21, 993 (2019)
2. K. Denes, B. Sandor and **Z. Neda**, *Pattern selection in a ring of Kuramoto oscillators*, **Communications in Nonlinear Science and Numerical Simulation**, vol. 78, UNSP 104868 (2019)
3. I. Papp, L. Varga, M. Afifi, I. Gere and **Z. Neda**, *Scaling in the space-time of the Internet*, **Scientific Reports**, vol. 9, 9734 (2019)
4. K. Denes, B. Sandor and **Z. Neda**, *On the predictibility of the final state in a ring of Kuramoto oscillators*, **Romanian Reports in Physics**, vol. 71, 108 (2019)
5. S. Kajanto and **Z. Neda**; *Universality in the coarse-grained fluctuations for a class of linear dynamical systems*, **Physica A**, Vol. 503, pp. 215-220 (2018)
6. T.S. Biro and **Z. Neda**; *Unidirectional random growth with resetting*, **Physica A**, Vol. 499, pp. 335-361 (2018)
7. T.S. Biro. A. Telcs and **Z. Neda**; *Entropic Distance for Nonlinear Master Equatio*n, **UNIVERSE**, Vol. 4, pp. 10 (2018)
8. **Z. Neda**, F. Jarai-Szabo and Sz. Boda, *Cell-size distribution and scaling in a one-dimensional Kolmogorov-Johnson-Mehl-Avrami lattice model with continuous nucleation*, **Physical Review E**, vol. 96, pp. 042145 (2017)
9. **Z. Neda**, L. Varga and T.S. Biro, *Science and Facebook: The same popularity law!,* **Plos One**, vol. 12, pp. e0179656 (2017)
10. T. Bíró and **Z. Neda**, *Equilibrium distributions in entropy driven balanced processes*, **Physica A**, vol. 474, pp. 355-362 (2017)
11. T. Bíró and **Z. Neda**, *Dynamical stationarity as a result of sustained growth*, **Physical Review E**, vol. 95, pp. 032130 (2017)
12. **Z. Neda**, L. Davidova, Sz. Ujvári and G. Istrate, Gambler's ruin problem on Erdos-Renyi graphs, **Physica A**, vol. 468, pp. 147-157 (2016)
13. S. Bulcsú, I. Simonsen, Zs. B. Nagy and **Z. Neda**, *Time-scale effects on the gain-loss asymmetry in stock indices*, **Physicl Review E**, vol. 94, pp. 022311 (2016)
14. G. Mate and **Z. Neda,** *The advantage of inhomogeneity –Lessons from a noise driven linearized system*, **Physica A**, vol. 445, pp. 310-317 (2016)
15. L. Varga, A. Kovács, G. Tóth, I. Papp and **Z. Néda***, Further we travel the faster we go*, **PLOS ONE**, vol. 11, art. Number e0148913 (2016)
16. B. Sándor and **Z. Néda**; *A spring-block analogy for the dynamics of stock indexes*, **Physica A**, vol. 427, pp 122-131 (2015)
17. L. Davidova, Sz. Ujvari and **Z. Neda**; *Sync or anti-sync-dynamical pattern selection in coupled self-sustained oscillator system*, **Journal of Physics** CS, (25th IUPAP Conference on Computational Physics, CCP2013), vol. 510, art. Number: 012009 (2014)
18. Sz. Boda. L. Davidova, **Z. Neda**; *Order and disorder in coupled metronome systems*, **European Physical Journal – ST,** vol. 233, pp. 649-663 (2014)
19. L. Davidova, Sz. Boda and **Z. Neda**; *Order-disorder transitions in a minimal model of self-sustained coupled oscillators*, **Romanian Reports in Physics**, vol .66, pp. 1018-1028 (2014)
20. B. Tyukodi and **Z. Neda**; *Kinetic Roughening of a soft dewetting line under quenched disorder: A numerical study*, **Physical Review E,** vol. 90, 052404 (2014)
21. Sz. Boda, Sz. Ujvari, A. Tunyagi and **Z. Neda**, *Kuramoto type phase transition with metronomes*,

European Journal of Physics, vol. 34, pp. 1451-1463 (2013)

22. Sz. Horvat and **Z. Neda**, *The complex parameter space of a two-mode oscillator model*, **Physica D – Nonlinear Phenomena**, vol. 256, pp. 43-50 (2013)
23. Sz. Boda, **Z. Neda**, B. Tyukodi and A. Tunyagi, *The rhythm of coupled metronomes*, **European Physical Journal B**, vol. 86, 263 (2013)
24. B. Sandor, F. Jarai-Szabo, T. Tel and **Z. Neda**, *Chaos on the conveyor belt*, **Physical Review E**, vol. 87, 042920 (2013)
25. B. Tyukodi, I.A. Chioar 9and **Z. Neda**, *A kinetic Monte Carlo study for stripe-like magnetic domains in ferrimagnetic thin films*, **Central European Journal of Physics**, vol. 11, pp. 487-496 (2013)
26. D.J. Wang, **Z. Neda** and L.P. Csernai, *Viscous potential flow analysis of peripheral heavy ion collisions*, **Physical Review C**, vol. 87, 024908 (2013)
27. K. Bakos, A. Dombi, F. Jarai-Szabo and **Z. Neda**, *Fragmentation of Drying Paint Layers*, **AIP Conference Proceedings** (TIM2012 Physics Conference), vol. 1564, pp.205-210 (2013)
28. F. Simini, A. Maritan and **Z. Neda**, *Human mobility in a Continuum Approach*, **PLOS One**, vol. 8, e60069 (2013)
29. B. Tyukodi, Z. Sarkozi, **Z. Neda**, A. Tunyagi and E. Gyorke, *The Boltzmann constant from a snifter*; European Journal of Physics, vol. 33, 455-465 (2012)
30. Z. Sarkozi, E. Kaptalan**, Z. Neda**, S. Boda, A. Tunyagi and T. Roska, *Optimization induced collective behavior in a system of flashing oscillators*, **International Journal of Bifurcation and Chaos**, vol. 22, 1230002 (2012)
31. L. P. Csernai, G. Mocanu and **Z. Neda**; *Fluctuations in hadronizing quark-gluon plasma*, **Physical Review C**, vol. 85, pp. 068201 (2012)
32. R. Deak and **Z. Neda**; *Kinetic Monte Carlo approach for triangular-shaped Pt islands on Pt(111) surfaces,* **Physica Status Solidi B**, vol. 249, pp. 1709-1716 (2012)
33. A. Derzsi and **Z Neda**; *A seed difusion model for tropical tree diversity patterns*, **Physica A**, vol. 391, pp. 4798-4806, (2012)
34. F. Jarai-Szabo and **Z. Neda**; *Earthquake models describes traffic jams caused by imperfect driving styles*, **Physica A**, vol. 391, pp. 5727-5738 (2012)
35. N. Derzsi, **Z. Neda** and M.A. Santos; *Income distribution patterns from a complete social security database*, **Physica A**, vol. 391, pp. 5611-5619 (2012)
36. F. Jarai-Szabo **and Z. Neda**; *Winning strategies in congested traffic*, **Int. J. of Modern Physics C,** vol. 23, pp. 1250063 (2012)
37. E.A. Horvat, F. Jarai-Szabo, Y. Brechet and **Z. Neda**; *Spring-block approach for crack patterns in glass*, **Central European Journal of Physics**, vol. 10, pp. 926-935 (2012)
38. R. Deak, **Z. Neda** and P.B. Barna; *A kinetic Monte Carlo approach for self-diffusion of Pt atom clusters on a Pt(111) surface*, **Comm. in Comp. Phys**., vol. 10, pp. 920-939 (2011)
39. F. Jarai-Szabo, E.A. Horvat, R, Vajtai and **Z. Neda**; *Spring-block approach for nanobristle patterns,* **Chem. Phys. Lett**., vol. 511, pp. 378-383 (2011)
40. F. Jarai-Szabo, S. Bulcsu and **Z. Neda**; *Spring-block model for a single-lane highway traffic*, **Central European Journal of Physics**, vol. 9, pp. 1002-1009 (2011)
41. A. Derzsi, N. Derzsy, E. Kaptalan and **Z. Neda**; *Topology of the Erasmus student mobility network*, **Physica A**, vol. 390, pp. 2601-2610 (2011)
42. G. Mate**, Z. Neda** and J. Benedek, *Spring-Block model reveals region-like structures*, **PLOS ONE**, vol. 6, e16518 (2011)
43. E. Balogh, I. Simonsen, B.Z. Nagy and **Z. Neda**, *Persistent collective trend in stock markets*, **Physical Review E**, vol. 82, 066113 (2010)
44. K.T. Leung and **Z. Neda**, *Criticality and pattern formation in fracture by residual stresses*, **Physical Review E**, vol. 82, 046118 (2010)

45. Sz. Horvat, A. Derzsi**, Z. Neda** and A. Balog, *A spatially explicit model for tropical tree diversity patterns***, Journal of Theoretical Biology**, vol. 265, pp. 517-523 (2010)

46. A.E. Horvath, F. Jarai-Szabo, G. Kaptay, R. Vajtai and **Z. Neda**, *Pattern formation and selection in nanotube arrays***, Univ. Politehnica of Bucharest Scientific Bulletin, Series A, Applied Mathematics and Physics**, vol. 72, pp. 27-32 (2010)

47. **Z. Neda**, F. Jarai-Szabo, E. Kaptalan and R. Mahnke, *Spring-block models and highway traffic*, **Control Engineering and Applied Informatics**, vol. 11 pp. 3-10 (2009)

48. **Z. Néda,** R. Sumi, M. Ercsey-Ravasz, M. Varga, B. Molnár and Gy. Cseh, Correlation clustering on Networks, **J. Phys. A**, vol. 42, 345003 (2009)

49. M. Ercsey-Ravasz, T. Roska and **Z. Neda**, *Stochastic optimization of spin-glasses on cellular neural/nonlinear network based processors*, **Physica A,** vol. 388, pp. 1024-1030 (2009)

50. R. Sumi, **Z. Neda**, A. Tunyagi and Cs. Szasz, *Nontrivial spontaneous synchronization,* **Physical Review E**, vol. 79, 056205 (2009)

51. M. Ercsey-Ravasz, T. Roska and **Z. Neda**,*Cellular Neural Networks for NP-hard optimizations,* **EURASIP Journal on Advances in Signal Processing,**, vol. 2009*,* Article ID 646975 (2009)

52. M. Ercsey-Ravasz, T. Roska and **Z. Neda**, Stochastic optimization of spin-glasses on cellular neural/nonlinear network based processors, **Physica A**, vol. 388, pp. 1024-1030 (2009)

53. M. Ercsey-Ravasz, Zs. Sarkozi, **Z. Neda**, A. Tunyagi and I. Burda; *Collective behavior of electronic fireflies,* **European Journal of Physics** *B*, vol. 65, pp. 271-277 (2008)

54. R. Deak, **Z. Neda** and P.B. Barna*; A simple kinetic Monte Carlo Approach for Epitaxial Submonolayer growth* **.Communications in Computational Physics***, vol. 3, 822-833 (2008)*

55. M. Ercsey-Ravasz, T. Roska and **Z. Neda***, Statistical physics on cellular neural network computers*, **Physica D**, vol. 237, 1226-1234 (2008)

56. R. Sumi and **Z. Neda;** *Molecular dynamics approach to correlation clustering*, **International Journal of Modern Physics C**, vol. 19, pp. 1349-1358 (2008)

57. R. Deak, Z. Neda and P. Barna; A *novel kinetic Monte Carlo method for epitaxial growth,* **Journal of Optoelectronics and Advanced Materials**, vol. 10, pp. 2445-2450 (2008)

58. R. Sumi and Z. Neda; *Synchronization of multi-mode pulse-coupled stochastic oscillators*, **Journal of Optoelectronics and Advanced Materials**, vol. 10, pp. 2455-2460 (2008)

59. A. E. Horvath, F. Jarai-Szabo and Z. Neda, *Spring-block type model for crack propagation in glass plates,* **Journal of Optoelectronics and Advanced Materials**, vol. 10, pp. 2433-2437 (2008)

60. M. Ercsey-Ravasz, T. Roska and **Z. Neda**, *Cellular neural networks for NP-hard optimization*, **2008 11th International Workshop on Cellular Neural Networks and their applications,** pp. 52-56 (2008)

61. F. Jarai-Szabo and **Z. Neda**, *On the size distribution of Poisson Voronoi cells,* **Physica A***, vol. 385, pp. 518-526 (2007)*

62. F. Jarai-Szabo, **Z. Neda**, S. Astilean, C. Farcau and A. Kuttesch*, Shake induced order in nanosphere systems***, European Physical Journal E,** *vol. 23, pp. 153-159 (2007)*

63. A. Kuttesch, C. Farcau, **Z. Neda** and S. Astilean, **Proceedings of SPIA** (ROMOPTO 2006: Eight Conference on Optics), vol. 6785 art. Number: 67850O (2007)

64. M.A Santos, R. Coelho, G. Hegyi, **Z. Neda** and J.J. Ramasco*, Wealth distribution in modern and medieval societies,* **European Physical Journal ST***, vol. 143, pp. 81-85 (2007)*

65. G. Hegyi, Z. Neda and M.A. Santos, *Wealth distribution and Pareto's law in the Hungarian medieval society,* **Physica A,** vol. 380, 271-277 (2007)

66. K. Kovacs and Z. Neda, Disorder-driven phase transition in a spring-block type magnetization model, **Physics Letters A**, vol. 361, 18-23 (2007)

67. M. Ercsey-Ravasz, T. Roska and **Z. Neda**, *Stochastic simulations on the cellular wave computers*, **European Physical Journal** B Vol. 51, 407-411 (2006)

68. K. Kovacs and **Z. Neda,** *Critical behavior of a spring-block model for magnetization***, J. of Optoelectronics and Advanced Materials, *Vol.* 8,** *1088-1092* (2006)

69. M. Ercsey-Ravasz, T. Roska and **Z. Neda**, *Perspectives for Monte Carlo simulations on the CNN universal machine*, I**nt. J. of Modern Physics C**, vol. **17**, 909-922 (2006)

70. F. Jarai-Szabo, A. Kuttesch, S. Astilean, **Z. Neda**, N. Chakrapami, P.M. Ajayan and R. Vajtai, *Spriing-block models for capillarity driven self-organized nanostructures,* **J. of Optoelectronics and Advanced Materials,** Vol. **8**, 1083-1087 (2006)

71. **Z. Neda**, R. Florian, M. Ravasz et al., *Phase transition in an optimal clusterization model*, **Physica A**, vol. **362**, 357-369 (2006)

72. M. Ercsey Ravasz, T. Roska and **Z. Neda**, *Random number generator and Monte Carlo type simulations on the CNN-UM,* **Proceedings of the 2006 10th IEEE International Workshop on Cellular Neural Networks and their Apllications**, pp. 47-52 (2006)

73. K. Kovacs, Y. Brechet and **Z. Neda**; *A spring-block model for Barkhausen noise*, **Modelling and Simulation in Mat. Sci. Eng. ,** vol. **13** (8): 1341-1352 (2005)

74. F. Jarai-Szabo, S. Astilean and **Z. Neda**; *Understanding self-assembled nanosphere patterns*, **Chemical Physics Letters**, Volume **408**, pp. 241-246 (2005)

75. R. Coelho, **Z. Néda**, J.J. Ramasco And M.A. Santos; *A family-network model for wealth distribution in societies*; **Physica A**, vol. 353, 515-528 (2005)

76. **Z. Néda, A.** Nikitin and T. Vicsek; *Synchronization of two-mode stochastic oscillators: a new model for rhythmic applause and much more*, **Physica A,** vol. 321, 238 (2003)

77. **Z. Néda** and S. Volkán-Kacsó; *Flatness of the setting Sun*, **Am. J. Phys**., vol. 71, 379 (2003)

78. H. Jeong, **Z. Néda** and A.L. Barabási; *Measuring preferential attachment in evolving networks*, **Europhys. Lett.,** vol. 61, 567 (2003)

79. Farkas, I. Derényi, H. Jeong, **Z. Néda**, Z.N. Oltvai, E. Ravasz, A. Schubert, A.-L. Barabási, T. Vicsek, *Networks in life, scaling properties and eigenvalue spectra*, **Physica A**, vol. 314, 25 (2002)

80. A.L. Barabasi, H. Jeong, **Z. Neda**, E. Ravasz, A. Schubert, T. Vicsek, *Evolution of the social network of scientific collaborations,* **Physica A** , vol. 311, 590 (2002)

81. **Z. Neda,** K.-t. Leung, L. Jozsa and M. Ravasz; *Spiral cracks in drying precipitates***, Phys. Rev. Lett.** vol. 88, 095502 (2002)

82. A. Nikitin, **Z. Néda** and T. Vicsek; *Collective Dynamics of two-mode stochastic oscillators*; **Phys. Rev. Lett**., vol. 87, 024101 (2001)

83. Y.H. Shiau, **Z**. **Neda;** *A novel resonance in n-GaAs diodes*, **Japanese Journal of Applied Physics, Part I.**, vol. 40, 6675 (2001)

84. M. Perez, J.C. Barbe, Z. **Neda**, Y. Brechet, L. Salvo, M. Suery, *Investigation of the microstructure and the rheology of semi-solid alloys by computer simulation*, **Jornal de Physique IV,** vol. 11 (PR5), 93 (2001)

85. K.-t. Leung, L. Jozsa, E. Ravasz and **Z. Néda**; *Spiral cracks without twisting;* **NATURE**, vol. 410, 166 (2001)

86. M. Perez, J.-C. Barbe, **Z. Néda**, Y. Brechet and L. Salvo*; Computer simulation of the microstructure*

and rheology of semi-solid alloys under shear, **Acta. Mater**., vol. 48, 3773 (2000)

87. K.-t. Leung and **Z. Néda**; *Pattern formation and selection in quasi-static fracture*, **Phys. Rev. Lett.** vol. 85, 662 (2000)

88. **Z. Néda**, E. Ravasz, T. Vicsek, Y. Brechet and A.L. Barabasi; *Physics of the rhythmic applause*, **Phys. Rev. E**, vol. 61, 6987 (2000)

89. **Z. Néda**, E. Ravasz, Y. Brechet, T.Vicsek and A.L. Barabasi*; The sound of many hands clapping*, **NATURE**, vol. 403, 849 (2000)

90. **Z. Néda**, A. Rusz, E. Ravasz, P. Lakdawala and P.M. Gade; *Spatial Stochastic Resonance in one-dimensional Ising Systems*, **Phys. Rev. E**, vol. 60, R3463 (1999)

91. **Z. Néda**, R. Florian and Y. Brechet; Reconsideration of *continuum percolation of isotropicly oriented sticks in 3d revisited*, **Phys. Rev. E**, vol. 59, 3717 (1999)

92. K-T. Leung and **Z. Néda**; *Non-trivial stochastic resonance temperatures for the kinetic Ising models***, Phys. Rev. E** , vol. 59, 2730 (1999)

93. Y. Brechet and **Z. Néda**; *On the circular hydraulic jump*, **Am. J. Phys.** vol. 67, 723 (1999).

94. Z.D. Lu, **Z. Néda**, L.P. Csernai, J. Sollfrank and P.V. Ruuscanen; *Quantum statistical effect in production of K and π mesons,* **High Energy Physics and Nuclear Physics** (chinese edition) vol.22, 910 (1998)

95. Z. Gabos and **Z. Néda**; *Construction of the Joos-Weinberg equations from Dirac equations*, **Heavy Ion Physics** vol. 7, 125 (1998)

96. K-T. Leung and **Z. Néda**; *Response in kinetic Ising model to oscillating magnetic fields*, **Phys. Lett. A**, vol. 246, 505 (1998)

97. D. Weygand, Y. Brechet and **Z. Néda**; *Cappilarity-driven interface dynamics: application to grain growth phenomenon*, **Phil. Mag. B**, vol. 75, 937 (1997)

98. **Z. Néda** and Y. Brechet*; A two-step Monte Carlo method for wetting on heterogeneous surfaces*, **Modelling Simul. Mater. Sci. Eng.** vol. 5, 93 (1997)

99. **Z. Néda**; *Stochastic resonance in 3D Ising ferro-magnets*, **Phys. Lett. A**, vol. 210, 125 (1996)

100. **Z. Néda**, B. Bako and E. Rees; *The dripping faucet experiment revised*, **CHAOS**, vol. 6, 59 (1996)

101. Y. Brechet. D. Bellet and **Z. Néda***; Patterns in fracture: Drying experiments and thermal shock,* **Key Engineering Materials** vol. 103, 247 (1995) (Solid State Phenomena Vols. 42-43, Eds. G. Ananthakrishna, L.P.Kubin and G. Martin)

102. Y. Brechet and **Z. Néda**; *On the Structure of Thermal Cracks in Glass*, **Europhys. Lett.**, vol. 32, 475 (1995)

103. **Z. Néda**; *Stochastic resonance in Ising systems*, **Phys. Rev. E**, vol. 51, 5315 (1995)

104. L. Csernai and **Z. Néda**; *Phase coexistance in Quark-Gluon Plasma*, **Phys. Lett. B**, vol. 337, 25 (1994)

105. **Z. Néda***; Curie temperatures for three-dimensional, binary Ising ferro-magnets*, **Phys. Rev. B**, vol. 50, 3011 (1994)

106. **Z. Neda**; *Curie temperatures for site-diluted Ising ferro-magnets***, J. Phys. I** (France), Vol. 4, 175 (1994)

107. **Z. Néda**, A. Mocsy and B. Bako*; Structures obtained by mechanical fragmentation of glass plates*, **Materials Science and Engineering A**, vol.169, L1 (1993).

108. **Z. Néda** and G. Lipi; *Instantaneous configurations of the Bloch walls in a two-dimensional and S=1/2 model*, **Journal of Magnetism and Magnetic Materials**, vol. 125, L263-268 (1993)

Other international publications

1. G. Máté, A. Kovács, **Z. Néda;** *Hierarchical settlement Networks*, **Regional Statistics**, vol 3, pp. 30-40 (2013)

2. A. Dombi, A. Tunyagi and Z. Neda, *Walkie-talkie measurement for the speed of radio-waves in air*, **Physics Education**, vol. 48, pp. 80-86 (2013)

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