# Curriculum Vitae

Elena DEZA

Moscow State Pedagogical University, Moscow, Russia

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e-mail: Elena.Deza@gmail.com
Date of Birth: August 23, 1961
Place of Birth: Volgograd, Russia
Nationality: French, Russian
Family status: married, one child

# Qualifications:

01.07.1983 Diploma in Mathematics, Department of Mathematics,
Moscow State Pedagogical University (EB 209494)
12.04.1993 Candidate of Science (Physics and Mathematics),
Department of Mathematics, Moscow State Pedagogical University (KD 078191)
20.12.1995 Certificate of dozent at the Chair of Number Theory,
Department of Mathematics, Moscow State Pedagogical University (DZ 015474)

# **Appointments:**

08.1983 - 08.1988: Assistant Professor at Department of Mathematics, Moscow Academy of Forest
09.1988 - 06.1993: Assistant Professor at Department of Mathematics, Moscow State Pedagogical University
07.1993 - 08.1994: Lecturer at Department of Mathematics, Moscow State Pedagogical University
09.1994 - 01.2006: Reader (dozent) at Department of Mathematics, Moscow State Pedagogical University
since 02.2006: Professor at Department of Mathematics, Moscow State Pedagogical University

# Selected publications (from 25 books and more than 120 articles)

# Monographs, dictionaries, encyclopedias

- 1. Deza E., Deza M.M. (2006) Dictionary of Distances, Elsevier
- 2. Deza E., Deza M.M. (2008) Encyclopedic dictionary of distances, Nauka, Moscow
- 3. Deza E., Deza M.M. (2009) Encyclopedia of distances, Springer Verlag
- 4. Deza E. (2011) Individual trajectories of subject preparation of the mathematics teacher in the system of variable education, MPGU, Moscow
- 5. Deza E. (2012) Preparation of the mathematics teacher in the conditions of variable education, MPGU, Moscow
- 6. Deza E., Deza M.M. (2012) Figurate numbers, World Scientific Publishing Company
- 7. Deza E., Deza M.M. (2013) Encyclopedia of distances, 2-nd edition, Springer Verlag

#### Teaching books

- 8. Deza E., Klimin S., Strunkina T. (2001) United examination in Mathematics, IC, Moscow
- 9. Panteleeva (Deza) E., Karasev G., Kukushkin B. (2002) Mathematics. Tasks for examinations, Vol. 2, MSPU, Moscow
- 10. Deza E., Sanina E. (2004) Rational numbers, TSPU, Tula
- Deza E., Baulina Y. (2004) Mathematical models, methods and theories, MPGU, Moscow
- 12. Deza E., Alphimova A. (2006) Discrete Mathematics: Integer points, MSPU, Moscow
- 13. Deza E. (2007) Zeta Functions and L-functions in Number Theory, Postech, Pohang
- 14. Deza E., Gmuleva A., Stepaniva L. (2008) Workshop on elementary mathematics: Arothmetics, MCCME, Moscow
- 15. Deza E. (2010) Special numbers of the natural row, URSS, Moscow
- 16. Deza E., Model D. (2010) Bases of discrete mathematics, URSS, Moscow
- 17. Deza E., Kotova L. (2012) Collection of tasks In the number theory, URSS, Moscow
- 18. Deza E., Shakhov Y. (2012) Numerical methods, URSS, Moscow

Papers (Mathematics)

- 19. Panteleeva (Deza) E. (1988) About divisor problem in number fields, Math. Notes, Vol. 44, 4
- 20. Panteleeva (Deza) E. (1993) One observation on Dirichlet divisor problem, Math. Notes, Vol. 53, 4
- 21. Panteleeva (Deza) E. (1994) On mean values of certain arithmetical sums, Math. Notes, Vol. 55, 2
- Panteleeva (Deza) E. (1997) New estimations of Dirichlet L-series and divisor problem in number fields, VINITI, 3497-b97
- 23. Deza M., Panteleeva (Deza) E. (2000) Quasi-semi-metrics, Oriented Multi-cuts and Related Polyhedra, European Journal of Combinatorics, Vol. 21, 6
- 24. Deza M., Dutour M., Panteleeva (Deza) E. (2003) Small cones of oriented polyhedra, American Journal of Mathematical and Management Sciences, Vol. 22, Issue 3,4
- 25. Deza E., Varukhina L. (2008) Representations of arithmetic sums over non-trivial zeros of the zeta function, Asian-European Journal of Mathematics, Vol. 1, № 4
- 26. Deza E., Varukhina L. (2008) On mean values of some arithmetic functions in number fields, Discrete Mathematics, Vol. 308, Issue 21
- 27. Deza E., M.M. Deza, J. Vidali (2011) Cones of weighted and partial metrics, Proceedings of the international conference on Algebra 2010, Advances in Algebraic Structures
- 28. Deza E., Deza M.M. (2011) Cones of partial metrics, Contributions to Discrete Mathematics, Vol. 6, № 1
- 29. Deza E., Deza M.M. Grishukhin V. (2012) Cones of weighted quasi-metrics, weighted quasi-hypermetrics and of oriented cuts, Mathematics of Distances and applications, Sofia (Bulgaria), Ithea

#### Papers (Pedagogic)

- 30. Panteleeva (Deza) E., Kukushkin B. (1998) About examinations in MPSU, Mathematics in school, Vol. 12
- Panteleeva (Deza) E., Kukushkin B. (2001) Olympiad in MPSU, Mathematics in school, Vol. 8
- 32. Panteleeva (Deza) E., Strunkina T., Chernetsov M., Klimin S. (2002) Some notes about united examinations, Problems of testing in education, Vol. 3
- 33. Deza E., Kukushkin B., Jdanov S. (2003) About examinations in MPGU, Mathematics in school, Vol. 2

- Deza E., Kukushkin B., Jdanov S. (2003) Examinations in MPGU, Kvant, Vol. 6 Mathematics in school, Vol. 2
- 35. Deza E., Kukushkin B., Jdanov S. (2007) Examinations in MPGU, Kvant, Vol. 6
- 36. Deza E. (2007) About the maintenance of an elective course "Figurate numbers", Mathematics in school, № 4, 5
- 37. Deza E. (2007) About the maintenance of an elective course "Perfect and amicable numbers", Mathematics in school, № 8, 9
- 38. Deza E., Model D. (2008) Methodical aspects of teaching of discrete mathematics in teacher training University, Works of MPGU, Issue 13
- 39. Deza E., Kukushkin B., Gdanov S. (2008) About examinations in MPGU, Mathematics in school, Vol. 2
- 40. Deza E. (2008) Some aspects of formation of individual educational trajectories in the conditions of variable education, Messenger of University of the Russian academy of education,  $N^{\circ}$  1
- 41. Deza E. (2008) About the maintenance of an elective course "Mersenne numbers and Fermat numbers", Mathematics in school, № 5 7
- 42. Deza E. (2008) Scientific and methodical bases of creation of subject andlevel model of an individual trajectory of preparation of the teacher of mathematics, Teacher XXI century, № 4
- 43. Deza E. (2009) Possibilities of creation of individual trajectories fundamental preparation of the mathematics teacher, Science and school,  $N^{\circ}$  1
- 44. Deza E. (2009/10) Pythagorean numbers. Elective course, Mathematics at school, № 10 (2009), № 1 (2010)
- 45. Deza E. (2012) Level model of subject and professional competences of the mathematics teacher, Pedagogical education and science,  $N^{\circ}$  3
- 46. Deza E. (2012) Features of implementation of the concept of creation of individual trajectories of fundamental preparation of the teacher of mathematics in the conditions of variable education, Science and school, № 2
- 47. Deza E. (2012) Basic provisions of the concept of creation of individual trajectories of fundamental preparation of the teacher of mathematics in the conditions of variable education, Messenger of University of the Russian academy of education,  $N^{\circ}$  1

- 48. Deza E. (2012) The theory and practice of fundamental preparation of the mathematics teacher in the conditions of realization of individual educational trajectories, Teacher XXI century,  $N^{\circ}$  2
- 49. Deza E. (2012) Disciplines for choice as a component of fundamental preparation of the teacher of mathematics in the conditions of variable education, Alma mater,  $N_{2}$  11

#### **Conference** papers (Mathematics)

- 50. Panteleeva (Deza) E. (1990) On a problem of Selberg, Proceedings of Conference on Number Theory, Tashkent, Russia
- 51. Panteleeva (Deza) E. (1993) Estimations of certain sums with Dirichlet characters, Proceedings of International Conference on Number Theory, Tula, Russia
- 52. Panteleeva (Deza) E., Kochetkov K. (1995) The amount of integer points in a circle, Proceedings of International Conference on Number Theory, Voronez, Russia
- 53. Panteleeva (Deza) E. (1997) Computation of generators and facets for the polyhedra of directed distances, Proceedings of International Conference on Computational Mathematics, Bangkok, Thailand
- 54. Panteleeva (Deza) E. (1997) Generators and facets for the Polyhedra of Directed Distances, Proceedings of International Conference on Statistical Inference, Combinatorics and related areas, Banaras, India
- 55. Panteleeva (Deza) E. (2000) The Dirichlet divisor problem in number fields, 15 Conference for young algebraists, Workshop on General Algebra, Potsdam, Germany
- 56. Panteleeva (Deza) E.(2003) Small cones of generalized semimetrics, ISM Symposium on Statistics, Combinatorics and Geometry, the Institute of Statistical Mathematics, Tokyo, Japan
- 57. Deza E. (2004) Integer points in some domains, Com2Mac Miniworkshop on Twoface embeddings of graphs and applications, Pohang, Korea
- 58. Deza E., Varukhina L. (2004) About integer points under some hyperbolic surfaces, COE Workshop on Sphere Packings at Kyushu University, Fukuoka, Japan
- 59. Deza E., Varukhina L. (2004) On integer points in special regions, International conference in Discrete Mathematics with Applications to Information Science and Related Topics, Chongquing, China
- 60. Deza E. (2006) Integer points in some domains, International Conference on Applied Combinatorics and Graph Theory, Xiamen, China
- 61. Deza E., Deza M.M. (2007) Similarities and Distances in Biology, Proceedings of PICB's International Xu Cuangqi Conference, Shanghai, China

- 62. Deza E. (2008) Small cones of generalized semi-metrics, Proceedings of the International Conference on Discrete Mathematics and applications (ICDMA 2008), The School of Science, the University of the Thai Chamber of Commerce, Pohang, Korea
- 63. Deza E., Deza M.M. (2009) Some generalizations of metrics, International conference "Discrete Geometry and Statistics of Configurations", Moscow, Russia

# Conference papers (Pedagogic)

- 64. Panteleeva (Deza) E., Topunov V. (1992) On two views on Arithmetics, Proceedings of Pedagogical Conference, Cheboksary, Russia
- 65. Panteleeva (Deza) E., Topunov V. (1994) The place of number in teaching courses, Proceedings of International Pedagogical Conference, Moscow, Russia
- 66. Panteleeva (Deza) E., Topunov V. (1995) Multistage system of teaching in course "Number systems", Proceedings of Pedagogical Conference, Razan, Russia
- 67. Panteleeva (Deza) E., Topunov V. (1996) On role of special courses for the system of multistage education, Proceedings of Pedagogical Conference, Razan, Russia
- 68. Panteleeva (Deza) E. (1997) Computers and Mathematical education, Proceedings of International Conference on Computational Mathematics, Bangkok, Thailand
- Panteleeva (Deza) E., Topunov V. (1999) Computers in Mathematical education, Proceedings of 10 International Conference on Computational Education, Troizk, Russia
- 70. Deza E. (2003) About the role of arithmetics for students of Pedagogical universities, Conference "Mathematical preparation of students of pedagogical universities in new Russian conditions", Twer, Russia
- 71. Deza E. (2003) About the role of number's notion for teacher's preparation in Russia, Conference in honor of 100th birthday of Kolmogorov A.N., Yaroslavl, Russia
- 72. Deza E., Sanina E. (2004) About new generation of mathematical textbooks, Conference "Problems of the theory and practices of mathematical education", San-Petersburg, Russia
- 73. Deza E. (2004) About opportunities of methodical providing elective courses for profile school, Materials of the second Russian scientific and practical conference devoted to the 110-th anniversary of A.Y. Hinchin, Kaluga, Russia
- 74. Deza E. (2005) About a number place in an educational program of preparation of the mathematics teacher, Materials of the International scientific conference devoted to the 100-th anniversary of academician S.M. Nikolsky, Moscow, Russia

- 75. Deza E. (2009) Research work as integrative component of an individual trajectory of professional training of the mathematics teacher, Materials of the International scientific education conference "Science in higher education institutions: mathematics, physics, informatics. Problems of the higher and secondary professional education", Moscow, Russia
- 76. Deza E. (2009) About a place of a course of discrete mathematics in system of professional training of future mathematics teacher, Materials of the II International scientific and practical Internet conference "New Technologies in Education", Taganrog, Russia
- 77. Deza E. (2009) Activization of creative activity of students on the basis of creation of individual trajectories of training, Collection of works of the Annual All-Russian scientific conference "Scientific Creativity of the XXI Century", Krasnoyarsk, Russia
- 78. Deza E. (2010) Features of the organization of educational and research work of students in the conditions of a two-level education system, Collection of scientific works of the tenth International scientific and practical conference "New Information Technologies in Education", Moscow, Russia
- 79. Deza E. (2010) Pedagogical maintenance of educational and research work of students in the conditions of a training individualization, IV-th International scientific and practical Internet conference (Collection of articles), Release 4.1, Krasnoyarsk, Russia
- 80. Deza E. (2011) Bases of the concept of creation of individual trajectories of vocational training of the mathematics teacher in the conditions of-level system of the higher education, Collection of works of the All-Russian conference "Mathematics, Informatics and Technique of Their Teaching", Moscow, Russia
- 81. Deza E. (2012) Methodical features of discipline for choice "Numerical metrics", Materials of the All-Russian scientific conference "Problems of improvement of mathematical preparation at school and higher education institution", Moscow, Russia
- 82. Deza E. (2012) Humanitarization of fundamental mathematical preparation of students of teacher training Universities, The All-Russian scientific conference with the international participation "Humanitarian traditions of mathematical education in Russia", Arzamas, Russia
- 83. Deza E., Panteleev P. (2013) Software use within a laboratory workshop on the course "Research of Operations", Materials of the 13-th Scientific and practical conference "New Information Technologies in Education", Moscow, Russia

# Lecture courses:

#### Moscow Academy of Forest

SS 83/84 – SS 87/88 Introduction in high mathematics (4 h) ("WS" ("SS") means winter (summer) semester which both consist of 17 weeks; "n h" means n times 45 minutes in front of the students per week per semester.) WS 86/87 Introduction to Ordinary Differential Equations (2 h) SS 86/87 The probability theory (2 h) WS 87/88 Linear algebra (2 h)

#### Moscow State Pedagogical University

since WS 88/89 Theory of divisibility (4 h) since SS 88/89 Combinatorics (4 h) since WS 89/90 Arithmetics (4 h) since WS 90/91 Number Theory (3 h) since WS, SS 91/92 Number Systems (3 h) since SS 94/95 Elementary Mathematics (3 h) since WS 95/96 Special chapters of arithmetics (2 h) since WS 95/96 Finite fields (2 h) since WS 99/2000 Introduction to Cryptography (4 h) since SS 99/2000 The history of Mathematics (2 h) since WS 02/03 Discrete Mathematics (2h) since WS 03/04 Computational methods (3h) since WS 03/04 Mathematical models, methods and theories (2h)

# Moscow City Pedagogical University

since WS 02/03 Discrete Mathematics (2h) since WS 03/04 Linear algebra (2h) since WS 03/04 Number Theory (2h) since WS 04/05 Mathematical logic (2h) since WS 04/05 Theory of algorithms (2h)

#### Moscow Independent University

since WS 03/04 Number Theory (2h) (with prof. Rosenbloom M.)

# Donghua University, Shanghai, China

WS 2006 Selected chapters in Analytic Number Theory (2h)

# Special courses and seminars:

since SS 91/92 The asymptotical low of the distribution of prime numbers since SS 93/94 The prime numbers in arithmetical progressions since WS 94/95 The special integer numbers

since SS 95/96 The lattice points in some regions since SS 97/98 The graphs and combinatorics since SS 2000/01 Discrete metric and quasi-metric spaces since SS 03/04 Special chapters of theory of distance metrics since SS 08/09 Figurate numbers

# **Ph.D.Students:**

Varukhina Lidiya, The estimations of some Dirichlet series, MSPU,
Oct. 1997 – Oct. 2000
Bazarova Anna, Vinogradov's method in the theory of Diophante inequalities, MSPU,
Oct. 1998 – Oct. 2002
Rupakova Ludmila, Role of elements of history in mathematical education, MSPU
(PhD degree - 18.05.2007 at MSPU)
Oct. 2003 - Oct. 2006
Alfimova Anastasiya, Introduction of elements of Discrete Mathematics on special courses in high school, MSPU
Oct. 2006 – Oct. 2009
(PhD degree - 13.04.2013 at MSPU)
Model Dmitrii, Some questions of study of Discrete Mathematics in Pedagogical Universities, MPGU
Oct. 2007 – Oct. 2009

# Diploma and Magistery's students:

More than 90 students, MSPU, 1994 - 2013. Main topics of research: Classical problems in Number Theory; Special integer numbers; Number fields; *P*-adical numbers; Theory of graphs; Selected topics in Discrete Mathematics; Discrete metric spaces

# University and Department Administration:

88/89/90: The main secretary of the admission commission, Department of Mathematics, MSPU
93/01: Dean assistant, Department of Mathematics, MSPU
98/08: Chairman of admission commission in Mathematics on MSPU since 2000: Member of evaluation committee (for PhD)

# Research track record:

A. Analytic Number Theory (Dirichlet Divisor problem, Dirichlet series, theory of Riemann's zeta function, mean values of arithmetical functions);

B. Discrete Mathematics (Combinatorics, Graph Theory, Special Integer Numbers)C. Theory of Discrete Metric Spaces (Oriented Metrics, *m*-metrics, Partial Metrics);D. Problems of Mathematical Education (Higher Pedagogical Education, Multilevel

System of Pedagogical Edication, Profile Training of School Students).

# Research visits:

Fields Institute, Toronto, Canada (2011), University of Ljubljana, Ljubljana, Slovenia (2010), Japan Advanced Institute of Science and Technology, Ishikawa, Japan (2009), Peking University, Peking, China (2008), Center for Applied Mathematics and Theoretical Physics, University of Maribor, Maribor, Slovenia (2007), CAS-MPG Partner institute for Computational Biology, Chinese Academy of Sciences, Shanghai, China (2006, 2007), Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary (2006), Siena University, Siena, Italy (2005), Kyushu University, Fukuoka, Japan (2004), Shanghai University, Shanghai, China (2004), Southwest China Normal University, Chongqing, China (2004), DIMACS, Rutgers University, New Jersey, USA (2004), South Utah University, Cedar City, USA (2004), South Pacific Universitry, Suva, Fiji (2004), Pohang University of Science and Technology, Pohang, South Korea (2004, 2005/06, 2006),The Institute of Statistical Mathematics, Tokyo, Japan (2003, 2004, 2005), Ecole Normale Superieure, Paris, France (2002), The Chinese University of Hong Kong, China (2001), The Institute of Mathematics, Academia Sinica, Taipei, China (2001, 2007), Academy of Science of Brazil, Rio de Janeiro, Brazil (1999), Universitat Bielefeld, Germany (1996, 1998), Chulalongkorn University, Bangkok, Thailand (1997), Banaras Hindu University, India (1997).