

Curriculum Vitae

Lidia Zofia Filus

Department of Mathematics
Northeastern Illinois University
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EDUCATION:

- 1979 Doctoral Degree in Mathematics, University of Warsaw, Poland
Dissertation: *A combinatorial approach to fixed point algorithms*
Advisor: Professor Jerzy Los
- 1971 M.S. Mathematics, University of Warsaw, Poland
M.S. Thesis: *Paley-Wiener type theorems*
Thesis Advisor: Professor Jan Kisynski

EMPLOYMENT & PROFESSIONAL AFFILIATIONS:

- 2013- present Chair, Department of Mathematics, Northeastern Illinois University, Chicago, IL
- Fall 2012 Acting Chair, Department of Mathematics, Northeastern Illinois University
- Nov. 2011 Visiting Professorship, Czestochowa University of Technology, Czestochowa, Poland (part of European Union Grant for strengthening and development of university curricula to increase the number of graduates majoring in science, engineering and mathematics)
- Nov. 1997 Visiting Professorship, Fern University, Hagen, Germany
- 1997-2000 Associate Dean, College of Arts and Sciences, Northeastern Illinois University
- 1996-1997 Acting Associate Dean, College of Arts and Sciences, Northeastern Illinois Univ.
- 1996 - present Professor of Mathematics, Northeastern Illinois University, Chicago, IL
- 1988-1996 Associate Professor, Department of Mathematics, Northeastern Illinois University
- 1985-1988 Assistant Professor, Department of Mathematics, Northeastern Illinois University

1982-1985	Instructor, Department of Mathematics, University of Kansas, Lawrence, Kansas
1980-1982	Visiting Research Fellow, Department of Applied Mathematics, Twente University of Technology (presently Twente University), Enschede, the Netherlands
1979-1980	Postdoctoral Research Fellow, Center for Operation Research and Econometrics, University of Louvain, Louvain-la-Neuve, Belgium
1979-1982	Assistant Professor, Department of Mathematics, Central School of Planning and Statistics (presently: Warsaw School of Economics), Warsaw, Poland
1971-1979	Instructor, Department of Mathematics, Central School of Planning and Statistics (presently: Warsaw School of Economics), Warsaw, Poland
Summer 1977	Research Fellow, Mathematics Research Center, University of Wisconsin-Madison
1975-77	Research Fellow, Dept. of Mathematical Methods in Economics, Computer Science Institute, Polish Academy of Sciences, Warsaw, Poland
Spring 1972	Fellow, International Semester on Mathematical Methods in Economics organized by the Polish Academy of Sciences in cooperation with UNESCO, Warsaw, Poland

TEACHING EXPERIENCE:

Service Courses: Statistics in Daily Life, Intermediate Algebra, Finite Mathematics, Business Calculus, Precalculus, College Algebra, Trigonometry

Undergraduate: Calculus, Linear Algebra, Discrete Mathematics, Number Theory, Foundation of Algebra, Probability and Statistics, Numerical Analysis, Real Analysis, Advanced Calculus-Single Variable, Operations Research, Linear Programming, Probabilistic Models in Operation Research, Independent Study: Risk Analysis

Graduate: Analysis, Linear Algebra, Mathematical Economics (Seminar), Introduction to Stochastic Models, Discrete Mathematics, Simulation, Mathematical Programming, Linear Programming and Extensions, Nonlinear Programming, Decision Theory, Groebner Bases (seminar), Independent Study Courses: Graph Theory, Variational Calculus, Risk Analysis, Fixed Point Algorithms, Game Theory, Differential Geometry

Directed Project Reports/Thesis for M.S. at Northeastern Illinois University

RESEARCH & GRANTS EXPERIENCE:

Research Interests

Fixed Point Algorithms and their Applications in Economics, Optimization, Game Theory
 Probabilistic Models in Operations Research, Mathematical Models in Reliability, Modeling of Complex Systems, Decision Theory, Risk Analysis

Pseudoexponential and Semi-Pseudoexponential Models in Medical Prognostics (with J. Filus), *American Institute of Physics Conference Proceedings 1281, Numerical Analysis and Applied Mathematics*, Vol. III, 1877-1880, 2010

Conditionally Specified Multivariate Distributions in Biomedical Applications (with J. Filus), Proceedings of the 1st Conference on Applied Probability and Statistical Methods and the 7th Conference on Multivariate Distributions with Applications, Maresias, Brazil, August 8-13, 2010

Decision Processes in Universities and Colleges in the United States (with Janet Fredericks) in *Humanization of Work and Modern Tendencies in Management*, Czestochowa University of Technology Monograph, ISBN 978-83-61118-57-2, 115-123, 2010

Families of multivariate distributions involving “triangular” transformations (with J. Filus and B. Arnold), *Communications in Statistics - Theory and Methods*, Volume 39, Issue 1, 107-116, 2010

Pseudoexponential modeling of cancer diagnostic testing (with J. Filus and M. Stehlik), *Biometrie und Medizinische Informatik Greifswalder Seminarberichte*, Heft 15, 41-54, 2009

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On Comparing Methods of Teaching Mathematics and

On two new methods for constructing multivariate probability distributions with system reliability motivations, Twelfth ISSAT International Conference on Reliability and Quality in Design, Chicago, IL, August 2006

On Pseudonormal Markovian Processes, Markov Processes and Related Topics Conference, University of Wisconsin-Madison, July 2006

A Construction of New Classes of n-variate Probability Densities, DeMoSTAFI Dependence
Modelling: Statistical Ta0.0-3(T)-3(A)-2(F)-3(I)14(D)-5(e)4(p)-4(e)4(n)-4(d)-4(e)4(n)-4(c)4(e)4()JTJETQq0.0000

Computation of Economic Equilibria, NEIU Math Dept Colloquium, October 1985

A generalization of Sperner's Lemma, Math. Dept. Colloquium, University of Kansas, 1984

Fixed Point Algorithms, Math. Dept. Colloquium, University of Southampton, England, 1980

A combinatorial description of fixed point algorithms, Applied Math. Dept. Colloquium, Twente University of Technology, the Netherlands, 1981

Fixed point algorithms, Math. Dept. Colloquium, University of Southampton, England, 1980

A combinatorial approach for some classes of fixed point algorithms, Operations Research Seminar, Center for Operations Research and Econometrics, Louvain-la-Neuve, Belgium, 1979

Graphs related to the fixed point algorithms, Tenth International Symposium on Mathematical Programming, Montreal, 1979

Fixed Point Algorithms and some graph problems, Symposium on Fixed Point Algorithms and Complementarity, University of Southampton, Southampton, England, 1979

Other Related Activities

Editorial

Program Committee of *Organization Review (Przegląd Organizacji)* <http://www.przegladorganizacji.pl/>, 2018 – present

Editorial Board of the *Stochastic Modeling and Applications*, 2016-present

Editorial Board of the *Journal of Applied Mathematics and Computational Mechanics*, 2012 – present

Editorial Board of the *Universal Journal of Mathematics and Mathematical Sciences*, 2011-present

Organizing and Scientific Committee of the International Conferences

Member of the Scientific Committee of the 18th Applied Stochastic Models and Data Analysis International Conference (ASMDA2019), June 11 -14, 2019, Florence, Italy

Member of the International Scientific Committees of the *International Conference on Risk Analysis, ICRA 8*, April 23 - 26, 2019, Vienna, Austria

Member of the Scientific Committee of the 5th Stochastic Modeling Techniques and Data Analysis (SMTDA) International Conference, June 12-15, 2018, Chania, Crete, Greece

Organizing and Scientific Committee of *the Second International Conference on Mathematical Algorithms*, June, 1995, Nizhny Novgorod, Russia

Chair of the (selected recent) conference sessions at

17th Applied Stochastic Models and Data Analysis International Conference (ASMDA2017) June 6-9, 2017, Morgan House, London, UK

International Conference on Risk Analysis, ICRA 6/RISK 2015, Barcelona, Spain, May 26 - 29, 2015

International Conference on Risk Analysis, ICRA 5, Tomar, Portugal, May 28-June 1, 2013

Organizer of the session *Selected Approaches in Modeling Risk in Health Science and Finance* at ICRA5

International Conference on Risk Analysis – ICRA4; Biomedicine, Environmetrics, Economics, Finance & Reliability, Limassol, Cyprus, May 26-29, 2011

NEIU Faculty Research Symposium, November 2010, 2013-2018

Stochastic Modeling Techniques and Data Analysis (SMTDA) International Conference, Chania, Crete, Greece, June 8-11, 2010

International Conference on Reliability and Quality in Design, San Francisco, August, 2009

The IAENG International Conference on Operations Research (ICOR'08), Hong Kong, March 19-21, 2008

14th ISSAT International Conference on Reliability and Quality in Design, Orlando, FL, August, 2008

ISBIS-2007 International Society for Business and Industrial Statistics, Azores, Portugal, August 18-20, 2007

ASMDA2007, International Conference on Applied Stochastic Models and Data Analysis, Crete, Greece, May 29- June 1, 2007

EURO2006, 21st European Conference on Operational Research, Reykjavik, Iceland, July 2006

Fourth International Symposium on Business and Industrial Statistics (ISBIS 4), Palm Cove, Australia, April 2005

DeMoSTAFI Dependence Modelling: Statistical Theory and its Applications in Finance and Insurance Conference, Quebec, Canada, May 2004

Grants:

National Cancer Institute, U54 Comprehensive Cancer Partnership to Advance Cancer Health Equity Grant, *Chicago Cancer Health Equity Collaborative (ChicagoCHEC)*, partnership of Northeastern Illinois University, University of Illinois in Chicago, and Robert H. Laurie Comprehensive Cancer Center of Northwestern University, 2015-2020, \$17.4 million (Grant Numbers U54CA202995, U54CA202997, and U54CA203000), Co-Chair of the grant's Internal Advisory Committee, 2016-2018, MPI since 2018

National Science Foundation Grant under the **Improving Undergraduate STEM Education (IUSE) program**, project title "*Peer Enhanced Experiential Research in STEM (PEERS)*", co-Principal Investigator, 2014-2017, \$426,738

Chicago Community Trust Strengthening Teacher and School Leader Preparation Planning Grant, NGEMS-*Next Generation Educator for Middle School: Refining STEM with Pedagogical Content and Literacy*, Co-Leader of the Math Team, 2015, \$100,000

NEIU Innovation Grant for the Undocumented Students Project, member of the team preparing the proposal, designing and implementing the project, 2012-14

US Department of Education, *The Illinois Professional Learners Partnership Grant*, NEIU Co-Director and Coordinator, 1999-2002

NEIU Research Community Awards:

Connecting Theoretical Statistical Models to Practical Software Applications: STAT-Shop ~ A Research Collaboration of NEIU Students and Faculty (with C. Ciecierski, Economics and R. Rustagi, Mathematics), 2008-09, \$5,000

Granular Research Community (with Paul Dolan, Richard Delzenero, Physics and Stefan Tsonchev, Chemistry), 2008-09, \$5,000

Granular Research Community (with Paul Dolan and Richard Delzenero, Physics), 2005-2006, \$5,000

NEIU Faculty Research and Scholarly Project Grant, 1995

National Science Foundation Grant for participation and presentation at the NSF Workshop on Improving the Breath of the Research Community in Operations Research, Wellesley College, Wellesley, MA, July 1986

SELECTED ADMINISTRATIVE & SERVICE EXPERIENCE:

Chair, Mathematics, NEIU, 2013-present

Acting Chair, Mathematics, NEIU, Fall 2012

College Assessment Task Force, 1997-2000

University Day Planning Committee, 1997

Departmental Service – selected examples from different periods:

Departmental Personnel Committee, Chair

Major Advisor

M.S. Advisor

M.S. Comprehensive Exam Committee

Service Courses Coordinator

Search and Screen Committee for faculty position, 1996-97, 2009-10, 2012-13

Departmental By-Laws Committee, Co-Chair

Department Union Representative

Selected Community Service:

Kosciuszko Foundation, Chicago Chapter President, 2006-present