Mihai Nicolae PASCU

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Contact

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Research interests

- Complex Analysis
- Stochastic Processes
- Connections to other areas (PDE, Mathematical Physics, etc)

Education

2010—2012	Postdoctoral studies (Mathematics and Applications in Economy) Institute of Economical Research of the Romanian Academy
1996—2002	Ph.D. (Mathematics) *Transilvania* University of Brașov
1996—2001	Ph.D. (Mathematics) University of Connecticut at Storrs
1996—1998	M.S. (Mathematics) University of Connecticut at Storrs
1995—1996	M.S. (Mathematics) *Transilvania* University of Brașov
1990—1995	B.Sc. (Mathematics and Computer Science) *Transilvania* University of Brașov

Employment

2015—present	Professor *Transilvania* University of Brașov
2018	Professor (invited M.S. course) University of Bucharest, Faculty of Mathematics and Computer Science
2006—2015	Associate Professor *Transilvania* University of Brașov
2004—2006	Assistant Professor *Transilvania* University of Brașov

2001—2004	Visiting Research Assistant Professor Purdue *University*
1996—2001	Teaching Assistant University of Connecticut at Storrs
1995—1996	Teaching Assistant *Transilvania* University of Brașov

Articles (selection)

- **M. N. Pascu**, I. Popescu, *Shy and Fixed-Distance Couplings of Brownian Motions on Manifolds*, Stoch. Proc. Appl. 126 (2016), No. 2, pp. 628—650.
- L. Beznea, **M. N. Pascu**, N. R. Pascu, *An Equivalence Between the Dirichlet and the Neumann Problem for the Laplace Operator*, Potential Analysis 44 (2016), No. 4, pp. 655—672.
- **M. N. Pascu,** N. R. Pascu, *Convex approximations of analytic functions* , Appl. Math. Comput. 232 (2014), pp. 559—567.
- **M. N. Pascu**, N. R. Pascu**,** *Starlike approximations of analytic functions,* Appl. Math. Comput. 218 (2012), No. 12, pp. 6825—6832.
- **M. N. Pascu**, N. R. Pascu, *Neighborhoods of univalent functions,* Bull. Aust. Math. Soc. 83 (2011), No. 2, pp. 210—219.
- **M. N. Pascu,** *Mirror coupling of reflecting Brownian motion and an application to Chavel's conjecture,* Electron. J. Probab. 16 (2011), No. 18, pp. 504—530.
- **M. N. Pascu**, M. E. Gageonea, *Monotonicity properties of the Neumann heat kernel in the ball,* J. Funct. Anal. 260 (2011), No. 2, pp. 490—500.
- M. E. Gageonea, **M. N. Pascu**, N.R. Pascu, *A Schwarz lemma for non-analytic functions defined in the unit disk*, Mathematica (Cluj) 53(76) (2011), No. 1, pp. 45—50.
- **M. N. Pascu**, N. R. Pascu, *In injectivity criteria for C^1 functions defined in non-convex domains*, Studia Univ. Babes-Bolyai, Mathematica LV (2010), No. 3, pp. 179—186.
- **M. N. Pascu**, A. Nicolaie, *On a discrete version of the Laugesen-Morpurgo conjecture,* Statist. Probab. Lett. 79 (2009), No. 6, pp. 797—806.
- M. E. Gageonea, **M. N. Pascu**, N. R. Pascu, *A maximum modulus principle for a class of non-analytic functions defined in the unit disk*, Mathematica 49 (72) (2007), No. 2, pp. 169—174.
- M. E. Gageonea, S. Owa, R. N. Pascu, **M. N. Pascu**, *A maximum modulus principle for non-analytic functions defined in the unit disk*, Appl. Math. Comput. 187 (2007), No. 1, pp. 163—169.
- S. Owa, **M. N. Pascu**, D. Yagi, and J. Nishiwaki, *Integral means for starlike and convex functions with negative coefficients*, Journal of Inequalities in Pure and Applied Mathematics 6 (2005), No. 2, Article 50, 14 pp. (electronic); Coeff. Ineq. Univ. Fct. Theory, (2005), pp. 59—75.
- **M. N. Pascu**, *A probabilistic proof of the Fundamental Theorem of Algebra*, Proc. Amer. Math. Soc. 133 (2005), No. 6, pp. 1707—1711.

- R. Bañuelos, M. Pang and **M. N. Pascu**, *Brownian motion with killing and reflection and the "Hot Spots" problem*, Probab. Theory and Rel. Fields 130 (2004), No. 1, pp. 56—68.
- **M. N. Pascu**, *Scaling couplings of reflecting Brownian motion and the hot spots problem*, Trans. Amer. Math. Soc. 354 (2002), No. 11, pp. 4681—4702.
- **M. N. Pascu** and V. Şerbu, *Non-analytic functions in an ellipse*, Studia Univ. Babes-Bolyai Math. 46 (2001), No. 2, pp. 101—105.
- N. N. Pascu, D. Răducanu, N. R. Pascu and **M. N. Pascu**, *Alpha-spiral functions in an elliptical domain*, Filomat 14 (2000), pp. 9—12.
- N. N. Pascu, D. Răducanu, N. R. Pascu and **M. N. Pascu**, *Starlike functions in an elliptical domai*n, Libertas Math. 20 (2000), pp. 63—65.
- H. Ovesea, **M. N. Pascu** and N. R. Pascu, *A generalization of the univalence criteria of Nehari, of Ahlfors and Becker and of Lewandowski*, General Mathematics 1 (1993), No. 1, pp. 3—10.

Books (selection)

- **M. N. Pascu**, N. R. Pascu, *Problems and solutions in Complex Analysis (in Romanian)*, Transilvania University Press, Brașov, 2011, ISBN 978-973-598-924-8.
- **M. N.Pascu,** *Stochastic calculus, Brownian motion and applications (in Romanian)***,** Transilvania University Press, Brașov, 2010, ISBN 978-973-598-749-7.
- **M. N. Pascu**, G. V. Orman (Editors), *Proceedings of the 23rd Scientific Session "Mathematics and Its Applications", Transilvania* University of Brașov, Brașov, May 8—9, 2009, Transilvania University Press, Brașov, 2009, ISSN 1843-6994.
- **M. N. Pascu,** *Brownian motion and Applications,* Transilvania University Press, Brașov, 2006, ISBN 973-635-828-3.
- **M. N. Pascu**, S. Owa (Editors), *Proceedings of the International Symposium "Complex Function Theory and Applications", Transilvania* University of Brașov, Brașov, September 1—5, 2006, Transilvania University Press, Brașov, 2006, ISBN 973-635-827-5

Grants

- **CO—PI** (**PI** at Transilvania University of Brașov) 2011—2016
  CNCSIS PNII-ID-PCCE-2011-2-0015, *Stochastic Analysis and Parameter Estimation in Systems with memory*
- Member 2011—2014
  CNSC PN-II-RU-TE-2011-3-0259, Randomness, Geometric Problems and Functional Inequalities
- **PI** 2007—2010
  CNCSIS PNII-IDEI 209, Brownian motion and applications: *monotonicity and extremum properties*
- Member 2006—2008
  CEEX 2-CEx06-11-10/25.07.06, *Complex analysis and related areas*
- **PI** 2006—2007
  CNCSIS - AT, *Maximum principles, monotonicity properties and applications*
- Member 2004—2006

CNCSIS - A, *Contributions to the geometric function theory of analytic functions*

- **PI** 2002—2004
  NSF (National Science Foundation, Division of Mathematical Sciences, SUA), *Reflecting Brownian motions in convex domains*
- Member 2001—2003
  CNCSIS - A, *Contributions to the geometric function theory of analytic functions*

Recognition

- "*Dimitrie Pompeiu*" prize of the Romanian Academy (Bucharest, Romania, 2013)
- "*Louis J. DeLuca*" prize for excellence in teaching (University of Connecticut at Storrs, SUA, 2000)
- Organizer/co-organizer of several international conferences (Complex analysis, Stochastic processes)
- Reviewer of scientific papers for various journals
- Invited lectures/courses/presentations