

List of Publications - Lucian BEZNEA

Monographs:

- L. Beznea and N. Boboc: *Potential Theory and Right Processes*. (Mathematics and Its Applications, vol. **572**), Kluwer Academic Publishers/Springer 2004, 376 p.

Scientific Publications:

- L. Beznea, M.N. Pascu, and N.R. Pascu: Brosamler's formula revisited and extensions. *Analysis and Mathematical Physics* (2019), to appear.
- L. Beznea, L. I. Ignat, and J. D. Rossi: From Gaussian estimates for nonlinear evolution equations to the long time behavior of branching processes. *Revista Matemática Iberoamericana* (2019), doi 10.4171/rmi/1071
- L. Beznea, I. Cîmpean, and M. Röckner: A new approach to the existence of invariant measures for Markovian semigroups. *Annales de l'Institut Henri Poincaré, Probabilités et Statistiques*. **55** (2019), 977–1000.
- L. Beznea, M. Deaconu, and O. Lupaşcu-Stamate: Numerical approach for stochastic differential equations of fragmentation; application to avalanches. *Mathematics and Computers in Simulation* **160** (2019), 111–125.
- L. Beznea and I. Cîmpean: Quasimartingales associated to Markov processes. *Trans. Amer. Math. Soc.* **370** (2018), 7761–7787.
- L. Beznea and I. Cîmpean: Invariant, super and quasi-martingale functions of a Markov process. In: *Stochastic Partial Differential Equations and Related Fields* (Springer Proceedings in Mathematics & Statistics **229**), Springer 2018, pp. 421–434.
- L. Beznea, I. Cîmpean, and M. Röckner: Irreducible recurrence, ergodicity, and extremality of invariant measures for resolvents. *Stochastic Processes and their Applications* **128** (2018), 1405–1437.
- L. Beznea, M.N. Pascu, and N.R. Pascu: Connections between the Dirichlet and the Neumann problem for continuous and integrable boundary data. In: *Stochastic Analysis and Related Topics* (Progress in Probability 72, Birkhäuser), Springer 2017, pp. 85–97.
- L. Beznea and S. Vlădoiu: Markov processes on the Lipschitz boundary for the Neumann and Robin problems. *J. Math. Anal. Appl.* **455** (2017), 292–311.
- L. Beznea, M. Deaconu, and O. Lupaşcu: Stochastic equation of fragmentation and branching processes related to avalanches. *J. of Statistical Physics* **162** (2016), 824–841.
- L. Beznea and O. Lupaşcu: Measure-valued discrete branching Markov processes. *Trans. Amer. Math. Soc.* **368** (2016), 5153–5176.
- L. Beznea, M.N. Pascu, and N.R. Pascu: An equivalence between the Dirichlet and the Neumann problem for the Laplace operator. *Potential Analysis* **44** (2016), 655–672.
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- L. Beznea, M. Deaconu, and O. Lupaşcu: Branching processes for the fragmentation equation. *Stochastic Processes and their Applications* **125** (2015), 1861–1885.
- L. Beznea and M. Röckner: On the existence of the dual right Markov process and applications. *Potential Analysis* **42** (2015), 617–627.
- L. Beznea and I. Cîmpean: On Bochner-Kolmogorov Theorem. In: *Séminaire de Probabilités XLVI* (Lecture Notes in Mathematics, Vol. 2123), Springer 2014, pp. 61–70.

- L. Beznea and A.-G. Oprina: Bounded and L^p -weak solutions for nonlinear equations of measure-valued branching processes. *Nonlinear Analysis: Theory, Methods & Applications* **107** (2014), 34–46.
- L. Beznea, O. Lupaşcu, and A.-G. Oprina: A unifying construction for measure-valued continuous and discrete branching processes. In *Complex Analysis and Potential Theory, CRM Proceedings and Lecture Notes*, vol. **55**, Amer. Math. Soc., Providence, RI, 2012, pp. 47–59.
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- L. Beznea and M. Röckner: From resolvents to càdlàg processes through compact excessive functions and applications to singular SDE on Hilbert spaces. *Bull. Sci. Math.* **135** (2011), 844–870.
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- L. Beznea and G. Trutnau: On the quasi-regularity of non-sectorial Dirichlet forms by processes having the same polar sets. *J. Math. Anal. Appl.* **384** (2011), 33–48.
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- L. Beznea, V. Brînzănescu, M. Iosifescu, and D. Timotin (editors): *Advances in Mathematics – Proceedings of the Eighth Congress of Romanian Mathematicians, Iași, 2015*. The Publishing House of the Romanian Academy, Bucharest, 2017.
- D. Bakry, L. Beznea, and M. Röckner (guest editors): *Revue Roumaine Math. Pures Appl.* **59**, No. 1, 2014 (Special issue dedicated to Professor Nicu Boboc on the occasion of his 80th birthday).
- L. Beznea, A. Gheondea, P. Hästö, C. Joița, and M. Vuorinen (editors): *Selected papers from the International Conference on Complex Analysis and Related Topics, and the 13th Romanian-Finnish Seminar (26-30 June 2012)*, *Math. Reports* **15** (65), No. 4, 2013.
- L. Beznea, V. Brînzănescu, M. Iosifescu, G. Marinoschi, R. Purice, and D. Timotin (editors): *Advances in Mathematics – Invited Contributions to the Seventh Congress of Romanian Mathematicians, Brașov, 2011*. The Publishing House of the Romanian Academy, Bucharest, 2013.
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- D. Bakry, L. Beznea, N. Boboc, and M. Röckner (editors): *Potential Theory and Stochastics in Albac. Aurel Cornea Memorial Volume*. Theta Foundation Bucharest, 2009 (distributed by Amer. Math. Soc.).
- D. Bakry, L. Beznea, Gh. Bucur, and M. Röckner (editors): *Current Trends in Potential Theory - Conference Proceedings, Bucharest, September 2002 and 2003*. Theta Foundation Bucharest, 2005 (distributed by Amer. Math. Soc.).
- L. Beznea and Gh. Bucur (editors): *Fifty Years of Modern Potential Theory in Bucharest – To the Anniversary of Nicu Boboc*. Editura Universității din București, 2004.

Ph. D. Thesis:

- *Teoria potențialului - clasificări în conuri de potențiale* [*Potential Theory - Classifications in Cones of Potentials*], Universitatea din București, 1990, 105 p. Ph. D. supervisor: Nicu Boboc.