

Education

- 2002 Ph. D., Mathematics, Princeton University
- 1999 M. A., Mathematics, Princeton University
- 1997 B. S., Mathematics, University of Bucharest

Employment

- 2008– Researcher, University of Bucharest, Algebra and Number Theory Research Center
- 2005–11 Assistant Professor, University of Pittsburgh
- 2002–05 T.H. Hildebrandt Research Assistant Professor, University of Michigan

Visiting Positions

- 2008 Max Plank Institute für Mathematik, Bonn, Germany (June–July)
- 2007 Hausdorff Research Institute for Mathematics, Bonn, Germany (June–July)
- 1998 Universitaire Instelling Antwerpen, Antwerp, Belgium (April–May)

Awards and Fellowships

- 2007–10 CNCSIS/UEFISCU Grant nr. 24/28.09.07 (co-PI, approx. 353,444\$)
- 2005–09 NSF Grant DMS–0536962 (PI, 86,034\$)
- 2004 Rackham Faculty Research Fellowship, University of Michigan
- 2002–05 T.H. Hildebrandt Research Assistant Professor, University of Michigan
- 1999–02 Assistantship in research, Princeton University
- 1998–99 Fellowship and first–year merit prize, Princeton University
- 1998 Tempus Foundation travel grant, Universitaire Instelling Antwerpen
- 1993–98 Romanian National Merit Scholarship, University of Bucharest

Professional Activities

- 2003– Referee for several journals:
American Journal of Mathematics, Boletín de la Sociedad Matemática Mexicana, Compositio Mathematica, International Mathematical Research Notices, Inventiones Mathematicae, Journal of Combinatorial Theory, Series A, Journal of Algebra, Journal of Algebraic Combinatorics, London Mathematical Society, Proceedings of the American Mathematical Society, Representation Theory, Symmetry, Integrability and Geometry: Methods and Applications
- 2003– Reviewer for Mathematical Reviews
- 2007– Grant proposal reviewer: NWO (Dutch Research Council)

Refereed journal articles

- [1] B. ION, The reconstruction of the antipode. *Stud. Cerc. Mat.* **50** (1998), no. 5-6, 369–372.
- [2] B. ION AND M. STĂNCIULESCU, Several examples of noncommutative noncocommutative bialgebras arising from the pentagonal equation. *Rev. Roumaine Math. Pures Appl.* **44** (1999), no. 3, 385–404.
- [3] B. ION, Some topics on $\text{HOM}_A(M, -)$ in the category of relative Hopf modules. *Comm. Algebra* **27** (1999), no. 3, 1297–1305.
- [4] S. DĂSCĂLESCU, B. ION, C. NĂSTĂSESCU, AND J. RIOS MONTES, Group gradings on full matrix rings. *J. Algebra* **220** (1999), no. 2, 709–728.
- [5] S. CAENEPEEL, B. ION, G. MILITARU, AND S. ZHU, Separable functors for the category of Doi–Hopf modules, applications. *Adv. Math.* **145** (1999), no. 2, 239–290.
- [6] S. CAENEPEEL, B. ION, G. MILITARU, AND S. ZHU, The factorization problem and the smash biproduct of algebras and coalgebras. *Algebr. Represent. Theory* **3** (2000), no. 1, 19–42.
- [7] S. CAENEPEEL, B. ION, AND G. MILITARU, The structure of Frobenius algebras and separable algebras. *K-Theory* **19** (2000), no. 4, 365–402.
- [8] B. ION, Nonsymmetric Macdonald polynomials and Demazure characters. *Duke Math. J.* **116** (2003), no. 2, 299–318.
- [9] B. ION, Involutions of double affine Hecke algebras. *Compositio Math.* **139** (2003), no. 1, 67–84.
- [10] B. ION, The Cherednik kernel and generalized exponents. *Int. Math. Res. Not.* **2004**, no. 36, 1869–1895.
- [11] B. ION, A weight multiplicity formula for Demazure modules. *Int. Math. Res. Not.* **2005**, no. 5, 311–323.
- [12] B. ION, Nonsymmetric Macdonald polynomials and matrix coefficients for unramified principal series. *Adv. Math.* **201** (2006), no.1, 36–62.
- [13] B. ION, Standard bases for affine parabolic modules and nonsymmetric Macdonald polynomials. *J. Algebra* **319** (2008), no. 8, 3480–3517.
- [14] A. L. AGORE, A. CHIRVĂȘITU, B. ION, AND G. MILITARU, Bicrossed products of finite groups. *Algebr. Represent. Theory* **12** (2009), no. 2-5, 481–488.
- [15] B. ION, Generalized exponents of small representations. I. *Represent. Theory* **13** (2009), 401–426.

Invited, refereed conference proceedings

- [16] S. CAENEPEEL, B. ION, G. MILITARU, AND S. ZHU, Separable functors for the category of Doi–Hopf modules, II. In: Hopf algebras and quantum groups (Brussels, 1998), 69–103. *Lecture Notes in Pure and Appl. Math.* **209**. Dekker, New York, 2000.
- [17] B. ION AND S. SAHI, Triple Artin groups and Cherednik algebras. In: Jack, Hall–Littlewood and Macdonald polynomials, 183–206. *Contemp. Math.* **417**. Amer. Math. Soc., Providence, RI, 2006.

Preprints

- [18] B. ION, Generalized exponents of small representations. II. Preprint 2009, 70 pg. <http://arxiv.org/abs/0904.2487>

- [19] B. ION, A Poincaré-Birkhoff-Witt theorem for Hopf algebras with central Hopf algebra coradical. Preprint 2009, 14 pg. <http://arxiv.org/abs/0905.2335>