PUBLICATIONS
Ionel POPESCU

Published or Submitted

- Shy and Fixed-Distance Coupling on Riemaniann Manifolds - with Mihai N. Pascu - submitted to *Proceedings of The London Math. Soc.*

- A Stochastic Target Approach to Ricci Flow on Surfaces - with Robert W. Neel - submitted to *Annals of Probability*

- Local One Dimensional Free Inequalities - *Journal of Functional Analysis*, volume **264**, no. 6, March 2013, pp.14561479 (*impact factor 1.252*)

- The One Dimensional Free Poincaré Inequality- with Michel Ledoux - *Transaction of AMS* **365** (2013), pp. 4811-4849 (*impact factor 1.019*)

- Analyticity of Planar Limits of a Matrix Model - with Stavros Garoufalidis - *Annales Henri Poincaré* April 2013, volume **14**, no. 3, pp 499-565 (*impact factor 1.529*)

- Toeplitz algebras arising from actions of $\mathbb{N}^r$ - with Iulian Popescu - *Revue Romaine de Mathématique pure et Appliquées* - **55**, (2010), no. 3. 205-240

- Mass Transportation Proofs of Free Functional Inequalities, and Free Poincaré Inequalities - with Michel Ledoux - *Journal of Functional Analysis* volume **257** (2009), no. 4, 1175-1221 (*impact factor 1.252*)

- General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations - *Probability Theory and Related Fields*, volume **144**, issue 1-2, May 2009, pp. 179-220 (*impact factor 1.394*)

- Talagrand Inequality for the Semicircular Law and Energy of the Eigenvalues of Beta Ensembles - *Mathematical Research Letters*, volume **14**, Issue 6, November 2007, pp. 1023-1032 (*impact factor 0.6*)

- Morse Inequalities, a Function Space Integral Approach - *Journal of Functional Analysis* **235** (2006), no. 1, 1–68, (*impact factor 1.252*)

In progress

- A Free One Dimensional Brascamp-Lieb Inequality - with Christian Houdré

- A Sharp Asymptotic Freeness Result and Random Matrices with Dependencies

- Free Functional Inequalities on the Circle

- Concentration of Mass in One Dimensional Free Probability - with Michel Ledoux

- Transportation Inequality on the Path Space of a Riemannian Manifold - with Elton Hsu

- Brownian Motion on Manifolds and Morse Theory

1. CITATIONS

1.1. Citations in journals indexed by Web of Science with impact factor ≥ 0.5.

(1) Arup Bose and Sanchayan Sen, Finite Diagonal Random Matrices, **Journal of Theoretical Probability** (2011), online first; IF=0.550
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(2) Liu, Dang-Zheng; Wang, Zheng-Dong; Yan, Kui-Hua, Density of eigenvalues and its perturbation invariance in unitary ensembles of random matrices, **J. Approx. Theory 162** (2010), no. 9, 1588-1606; IF=0.755
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(3) Djalil Chafai, Aspects of large random Markov kernels, **Stochastics: An International Journal of Probability and Stochastic Processes, 81 (3-4)** (2009), pp. 415-429; IF=0.508
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(4) Charles Bordenave, Pietro Caputo, Djalil Chafai, Spectrum of large random reversible Markov chains: two examples, **ALEA-Latin American Journal of Probability and Mathematical Statistics 7** (2010), 41-64;IF=0.564
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(5) Dang-Zheng Liu, Xin Sun, Zheng-Dong Wang, Fluctuation of Eigenvalues for Random Toeplitz and Related Matrices, **Electronic Journal of Probability** (2012), 1–22; IF=0.785
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(6) Mylène Maïda, Edouard Maurel-Segala, Free transport-entropy inequalities for non-convex potentials and application to concentration for random matrices, PTRF **arXiv:1204.3208** (2013), IF=1.394
Citeaza: Michel Ledoux and Ionel Popescu *Mass Transportation Proofs of Free Functional Inequalities, and Free Poincaré Inequalities*, **Journal of Functional Analysis 257** (2009), pag. 1175-1221;

(7) Mylène Maïda, Edouard Maurel-Segala, Free transport-entropy inequalities for non-convex potentials and application to concentration for random matrices, PTRF **arXiv:1204.3208** (2013), IF=1.394
Citeaza: Ionel Popescu *Local One Dimensional Free Inequalities*, **Journal of Functional Analysis 264**(6), 1456–1479 (2013); FI = 1.252

(8) Alexander Bufetov, Sevak Mkrtchyan, Maria Shcherbina, Alexander Soshnikov, Entropy and the Shannon-McMillan-Breiman Theorem for Beta Random Matrix Ensembles, **Journal of Statistical Physics**, July 2013, Volume **152**, Issue 1, pp 1-14, IF=1.400.
Citeaza: Ionel Popescu *Talagrand Inequality for the Semicircular Law and Energy of the Eigenvalues of Beta Ensembles*, **Mathematical Research Letters 14** (2007), pag. 1023-1032

1.2. Citations in non ISI but very good journals.

(9) Ioana Dumitriu, Elliot Paquette, Global Fluctuations for Linear Statistics of β-Jacobi Ensembles, **Random Matrices: Theory and Applications** online (2012)
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(10) Bordenave, Charles, Chafaï, Djalil, Around the circular law, **Probability Surveys, 9** (2012), 1-89;
Citeaza: Ionel Popescu '*General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(11) Nathael Gozlan, Christian Leonard, Transport Inequalities. A Survey, **Markov Process. Related Fields 16** (2010), no. 4, 635736;
Citeaza: Michel Ledoux and Ionel Popescu *Mass Transportation Proofs of Free Functional Inequalities, and Free Poincaré Inequalities*, **Journal of Functional Analysis 257** (2009), pag. 1175-1221;

(12) Nathael Gozlan, Christian Leonard, Transport Inequalities. A Survey, **Markov Process. Related Fields 16** (2010), no. 4, 635736;
Citeaza: Ionel Popescu *Talagrand Inequality for the Semicircular Law and Energy of the Eigenvalues of Beta Ensembles*, **Mathematical Research Letters 14** (2007), pag. 1023-1032;

1.3. Citations from journals with IF < 0.5 or preprints.

(13) Deaconu, Valentin; Kumjian, Alex; Pask, David; Sims, Aidan, Graphs of C^*-correspondences and Fell bundles, **Indiana University Mathematical Journal** (2010), no. 5, 1687–1735; IF=0.416

Citeaza: Ionel Popescu and Iulian Popescu: *Toeplitz algebras arising from actions of* $\mathbb{N}^r$, **Revue Romaine de Mathématique pure et Appliquées 55** (2010), no 3. pp 179-220

(14) Anirban Basak, Arup Bose, Limiting spectral distributions of some band matrices, **Periodica Mathematica Hungarica 83, no.1** (2011); IF=0.261
Citeaza: Ionel Popescu *'General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(15) Bose, Arup; Hazra, Rajat Subhra; Saha, Koushik, Patterned random matrices and method of moments, **Proceedings of the International Congress of Mathematicians** (2010) pp. 2203-2231;
Citeaza: Ionel Popescu *'General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;

(16) Yoann Dabrowski, A non-commutative Path Space approach to stationary free Stochastic Differential Equations, **arXiv:1006.4351** (2010)
Citeaza: Michel Ledoux and Ionel Popescu *Mass Transportation Proofs of Free Functional Inequalities, and Free Poincaré Inequalities*, **Journal of Functional Analysis 257** (2009), pag. 1175-1221;

(17) Li, Songzi, Xiang-Dong Li, and Yong-Xiao Xie. Generalized Dyson Brownian motion, McKean-Vlasov equation and eigenvalues of random matrices, **arXiv preprint arXiv:1303.1240** (2013).
Citeaza: Michel Ledoux and Ionel Popescu *Mass Transportation Proofs of Free Functional Inequalities, and Free Poincaré Inequalities*, **Journal of Functional Analysis 257** (2009), pag. 1175-1221;

(18) Sosoe, Philippe, and Percy Wong. Convergence of the eigenvalue density for beta-Laguerre ensembles on short scales, **arXiv preprint arXiv:1302.1458** (2013)
Citeaza: Ionel Popescu *'General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations*, **Probability Theory and Related Fields 144** (2009), pag. 179-220;