

## 1. Lista Publicatii

### Published or accepted

- Upper bound for the rate of convergence of a second functional in optimal alignment - with Raphael Hause and Henry Matzinger - accepted (pending revisions) - *Journal of Statistical Physics*
- Free Functional Inequalities on the Circle - accepted (pending revisions) in *Advances in Mathematics*
- Couplings of Brownian Motions of deterministic distance on the model spaces of constant curvature - with Mihai Pascu - accepted (pending revisions) in *Journal of Theoretical Probability*
- Upper bound for the rate of convergence of a second functional in optimal alignment - with Raphael Hause and Henry Matzinger - in press in Bernoulli (see here: <http://www.bernoulli-society.org/index.php/publications/bernoulli-journal/bernoulli-journal-papers> or the pdf link <http://www.e-publications.org/ims/submission/BEJ/user/submissionFile/20462?confirm=488d42e4>)
- Refinements of the One Dimensional Free Poincare Inequality - with Christian Houdré - *International Mathematics Research Notices*, Issue 17, 2015, pp. 8116-8151
- A refinement of Brascamp-Lieb-Poincare inequality in one dimension - *Comptes Rendus Mathématique* volume **352**, no. 1, January 2014, pp. 55–58
- Shy and Fixed-Distance Coupling on Riemannian Manifolds - with Mihai N. Pascu - *Stochastic Processes and their Applications* - Volume **126**, Issue 2, February 2016, Pages 628–650
- A Stochastic Target Approach to Ricci Flow on Surfaces - with Robert W. Neel - *Annals of Probability*, volume **44**, no. 2, Feb 2016, pp. 1341–1425
- Local One Dimensional Free Inequalities - *Journal of Functional Analysis*, volume **264**, no. 6, March 2013, pp.1456–1479
- The One Dimensional Free Poincaré Inequality- with Michel Ledoux - *Transaction of AMS* **365** (2013), pp. 4811-4849
- Analyticity of Planar Limits of a Matrix Model - with Stavros Garoufalidis - *Annales Henri Poincaré* April 2013, volume **14**, no. 3, pp 499-565
- 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
- General Tridiagonal Random Matrix Models, Limiting Distributions and Fluctuations - *Probability Theory and Related Fields*, volume **144**, issue 1-2, May 2009, pp. 179-220

- 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

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

### **Preprints**

- From Girsanov to gradient estimates - with Elton Hsu

### **In progress**

- A Sharp Asymptotic Freeness Result and Random Matrices with Dependencies

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