Amaury Freslon

Citizenship : French
Married, two children
Born 29/10/1987
amaury.freslon@math.universite-paris-saclay.fr
https://www.imo.universite-paris-saclay.fr/~freslon/

Adress

Université Paris-Saclay
CNRS UMR 8628
Institut de Mathématique d'Orsay – Bâtiment 307
91405 Orsay Cedex
France

Positions

- **Maître de Conférences** — Orsay, France
  Université Paris-Sud XI — *2015 - present*
- **Post-doctoral researcher** — Saarbrücken, Germany
  Universität des Saarlandes — *2014 - 2015*
- **Ph.D. student** — Paris, France
  University Paris VII — *2011 - 2014*

Education

- **University Paris VII** — Paris, France
  Ph.D. in Mathematics — *2011 - 2014*
  — Advisor : Étienne Blanchard
- **École Normale Supérieure** — Paris, France
  Studies in Mathematics — *2007 - 2011*
- **Preparatory classes** — Tours, France
  Preparation for competitive exams to enter "Grandes Écoles" — *2004 - 2007*

Degrees

- **Habilitation in Mathematics** — Orsay, France
  University Paris-Saclay — *2019*
  — Thesis : Studies of free quantum groups : Analysis, Algebra and Probability
- **Ph.D. in Mathematics** — Paris, France
  University Paris VII — *2013*
  — Title : Approximation properties for discrete quantum groups
- **Master in Mathematics** — Paris, France
  University Paris VII — *2010*

— Advisor : Étienne Blanchard

- **Agrégation externe de Mathématiques** *2009*
  Competitive exam giving a position in the public education system
- **Bachelor in Mathematics** Paris, France
  University Paris-Sud XI/ENS *2008*

Publications and preprints

22. *Free wreath products with amalgamation*, preprint (2021).
21. *Cutoff profiles for quantum Lévy processes and quantum random transpositions* (with L. Teyssier and S. Wang), preprint (2020).
20. *On the classification of partition quantum groups*, Exp. Math. **30** (2021), n° 2, pp. 238–270.
19. *Positive definite functions and cut-off for discrete groups*, Canad. Math. Bull. **64** (2021), n° 2, pp. 306–322.
18. *Topological generation and matrix models for quantum reflection groups* (with M. Brannan and A. Chirvasitu), Adv. Math. **363** (2020), 106982.
17. *On the representation theory of some noncrossing partition quantum groups*, to appear in Algebr. Represent. Theory (2019).
16. *Quantum reflections, random walks and cut-off*, Internat. J. Math. **27** (2018), n° 14, 1850101.
15. *Cut-off phenomenon for random walks on free orthogonal quantum groups*, to appear in Probab. Theory Related Topics (2018).
14. *Torsion and K-theory for some free wreath products* (with R. Martos), 2020 (2020), n° 6, pp. 1639–1670.
13. *On two-coloured noncrossing partition quantum groups*, Trans. Amer. Math. Soc. **372** (2019), n° 6, pp.4471–4508.
12. *Modelling questions for quantum permutations* (with T. Banica), Infin. Dimens. Anal. Quantum Probab. Relat. Top. **21** (2018), n° 2, 1–26.
11. *The radial MASA in free orthogonal quantum groups* (with R. Vergnioux), J. Funct. Anal. **271** (2016), n° 10, pp. 2776–2807.
10. *Wreath products of quantum groups by finite groups* (with A. Skalski), J. Noncommut. Geom. **12** (2018), n° 1, pp. 29–68.
9. *On the partition approach to Schur-Weyl duality and free quantum groups* (with an appendix by A. Chirvasitu), Transform. Groups **22** (2017), n° 3, pp. 707–751.
8. *On bi-free de Finetti theorems* (with M. Weber), Ann. Math. Blaise Pascal **23** (2016), n° 1, pp. 21–51.
7. *Permanence of approximation properties for discrete quantum groups*, Ann. Inst. Fourier **65** (2015), n° 4, pp. 1423–1436.
6. *Fusion (semi)rings arising from quantum groups*, J. Algebra **417** (2014), pp. 161–197.
5. *On the representation theory of partition (easy) quantum groups* (with M. Weber), J. Reine Angew. Math. **720** (2016), pp. 155-197.
4. *Graphs of quantum groups and K-amenability* (with P. Fima), Adv. Math. **260** (2014), pp. 233-280.
3. *CCAP for universal discrete quantum groups* (with K. De Commer and M. Yamashita and an appendix by S. Vaes), Comm. Math. Phys. **331** (2014), n° 2, pp. 677–701.
2. *Examples of weakly amenable discrete quantum groups*, J. Funct. Anal. **265** (2013), n° 9, pp. 2164–2187.

1. *A note on weak amenability for reduced free products of discrete quantum groups*, C. R. Acad. Sci. Paris Ser. I, **350** (2012), nº 7–8, pp. 403–406.

Reports

3. *Partition actions of partition quantum groups*, Oberwolfach reports **44** (2021).
2. *On the classification of non-crossing partition quantum groups*, Oberwolfach reports **45** (2019).
1. *Cut-off for quantum random walks*, Oberwolfach reports **22** (2018).