

Abel LACABANNE

Maître de conférences

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Born on 25th of February 1992 in Bayonne, France
French citizenship

Emploiment

- Sep. 2021- **Maître de conférences**, Université Clermont Auvergne, Clermont-Ferrand
Equivalent to an assistant professor position, tenured
- Oct. 2020-Août 2021 **Post-Doctoral position**, Université Catholique de Louvain, Louvain-la-Neuve
Chargé de Recherches F.R.S.-FNRS
- Mar. 2019-Sep. 2020 **Post-Doctoral position**, Université Catholique de Louvain, Louvain-la-Neuve
Collaborateur scientifique F.R.S.-FNRS
- Sep. 2018-Fév. 2019 **ATER**, Institut Montpellierain Alexander Grothendieck (IMAG) and Université de Montpellier, Montpellier
Temporary teaching and research position
- 2015-2018 **Ph.D. student**, Institut Montpellierain Alexander Grothendieck (IMAG) and Université de Montpellier, Montpellier
Under the supervision of Cédric Bonnafé, defended on November 29th 2018
- Avr.-Mai 2018 **Program Associate**, Mathematical Sciences Research Institute, Berkeley
Scientific program Group Representation Theory and Applications
- 2011-2015 **École Normale Supérieure**, Paris

Research interests

Representation theory • Hopf algebras • Quantum groups • Tensor categories
• Categorification • Complex reflection groups

Publications

Abel Lacabanne, *Slightly degenerate categories and $\mathbb{Z}$ -modular data*, Int. Math. Res. Not **2021** (2019), no. 12, 9340–9374, 1807.00766.

Abel Lacabanne, *Drinfeld double of quantum groups, tilting modules and $\mathbb{Z}$ -modular data associated to complex reflection groups*, J. Comb. Algebra **4** (2020), no. 3, 269–323, 1807.00770.

Abel Lacabanne, *Crossed S -matrices and Fourier matrices for Coxeter groups with automorphism*, J. Algebra **558** (2020), 550–581, 1902.07021.

Abel Lacabanne, *On a conjecture about cellular characters for the complex reflection group $G(d, 1, n)$* , Ann. Math. Blaise Pascal **27** (2020), no. 1, 37–64, 1912.06427.

Abel Lacabanne and Pedro Vaz, *Schur–Weyl duality, Verma modules, and row quotients of Ariki–Koike algebras*, Pacific J. Math. **311** (2021), no. 1, 113–133, 2004.01065.

Abel Lacabanne, Grégoire Naisse, and Pedro Vaz, *Tensor product categorifications, Verma modules and the blob 2-category*, Quantum Topol. **12** (2021), no. 4, 705–812, 2005.06257.

Abel Lacabanne, *Fourier matrices for $G(d, 1, n)$ from quantum general linear groups*, J. Algebra **586** (2021), 433–466, 2011.11332.

Abel Lacabanne, Daniel Tubbenhauer, and Pedro Vaz, *Annular webs and Levi subalgebras*, J. Comb. Algebra **7** (2023), no. 3-4, 283–326, 2204.00947.

Nicolas Jacon and Abel Lacabanne, *On Calogero-Moser cellular characters for imprimitive complex reflection groups*, Tunis. J. Math. **5** (2023), no. 4, 605–625, 2204.01014.

Juliet Cooke and Abel Lacabanne, *Higher Rank Askey-Wilson Algebras as Skein Algebras*, Ann. Inst. Fourier (Grenoble), to appear, 2205.04414.

Abel Lacabanne, Daniel Tubbenhauer, and Pedro Vaz, *Verma Howe duality and LKB representations*, Arxiv e-print, 2207.09124, submitted.

Abel Lacabanne, Daniel Tubbenhauer, and Pedro Vaz, *A formula to evaluate type A webs and link polynomials*, Ark. Mat., to appear, 2209.12169.

Abel Lacabanne, Daniel Tubbenhauer, and Pedro Vaz, *Asymptotics in finite monoidal categories*, Proc. Amer. Math. Soc. Ser. B **10** (2023), 398–412, 2307.03044.

Abel Lacabanne and Loïc Poulain d’Andecy, *Framization of Schur–Weyl duality and Yokonuma–Hecke type algebras*, Arxiv e-print, 2312.14796, submitted.

Abel Lacabanne, Daniel Tubbenhauer, and Pedro Vaz, *Asymptotics in infinite monoidal categories*, Arxiv e-print, 2404.09513, submitted.

Talks (selection)

- Jan. 2023 **Informal Categorification Seminar**, *Columbia university*, online
Verma Howe duality and LKB representations of braid groups
- Jan. 2023 **Guest Seminar Groups and Representations**, *RPTU Kaiserslautern*, Kaiserslautern
Verma Howe duality and LKB representations of braid groups
- Dec. 2021 **Séminaire d’algèbre**, *Institut Henri Poincaré*, Paris
Higher rank Askey–Wilson algebra as skein algebra
- Jun. 2021 **Online Representation Theory Seminar**, *University Tor Vergata*, online
An asymptotic cell category for $G(e, e, n)$
- Fev. 2021 **Categorification Learning Seminar**, *University of Oregon*, online
Fourier matrices for $G(d, 1, n)$ via quantum general linear groups
- Dec. 2019 **Nikolaus Conference**, *RWTH Aachen*, Aix-la-Chapelle
A Quotient of Ariki-Koike Algebra as an Endomorphism Ring
- Sep. 2019 **Séminaire GRAP One : Groupes et Représentations**, *Amiens et Paris, Université de Picardie Jules Verne*, Amiens
An asymptotic cell category for $G(e, e, n)$
- Mar. 2019 **Workshop: Representations of Finite Groups**, *Mathematisches Forschungsinstitut Oberwolfach*, Oberwolfach
A categorical framework for Fourier matrices for Coxeter groups with automorphism
- Nov. 2018 **Representations in Lie Theory and Interactions**, *Centre International de Rencontres Mathématiques*, Luminy
Categorification of $\mathbb{Z}$ -modular data associated to complex reflection groups
- Mar. 2017 **Categories and categorification**, *New York University Abu Dhabi*, Abu Dhabi
Triangulated monoidal categories