Léa BITTMANN

November 2018

Oskar-Morgenstern-Platz 1 Vienna 1090, Austria

Phone: (+33) 6 75 29 59 01

Email: lea.bittmann@imj-prg.fr

Date of birth: 26/12/1991
Nationality: French and

Canadian

# Education and Academic career

Education and Ac	sauemic career
2019 –	Universität Wien, Vienna.
	Postdoctoral Researcher in the team of Anton Mellit
2016 - 2019	Université Paris Diderot, Paris.
	PhD in Mathematics, Advisor: David Hernandez
July 2016	Agrégation de mathématiques, French diploma for higher education
-	teaching.
2015 - 2016	Université Pierre et Marie Curie, Paris.
	M.Sc. of teaching in Mathematics, Summa cum Laude.
	Training for higher education teaching.
2014 - 2015	Université Paris Diderot, Paris, France.
	M.Sc. in Fundamental Mathematics, Summa cum Laude.
2012 - 2014	ÉCOLE NORMALE SUPÉRIEURE (ENS), Paris.
	First year of M.Sc. in Fundamental Mathematics.
	B.Sc. in Mathematics, with high honors.
2009 - 2012	Lycée du Parc, Lyon, France.
	Completed a three-year scientific program in preparation for the national
	"Grandes Écoles" competitive exam.
2006 - 2009	Lycée Kléber, Strasbourg, France.
	Baccalauréat, with highest honors.
	High School Diploma specialized in Sciences.
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Publications	
July 2019	PhD Thesis: Quantum Grothendieck rings, cluster algebras and quantum
	affine category $\mathcal{O}$ .
February 2019	Quantum Grothendieck rings as quantum cluster algebras, preprint: arXiv:1902.00502.
August 2018	Asymptotics of Standard Modules of Quantum Affine Algebras, in Alge-
August 2010	bras and Representation Theory.
September 2015	Master Thesis: Representations of the Yangian in Deligne's category
September 2010	Rep $(Gl_t)$ .
	$Tocp(Go_t)$ .
Talks - Posters	
June 2019	Cluster Algebra 2019, Poster of the Day, Kyoto, Japan.
Julie 2010	Quantum Grothendieck rings as quantum cluster algebras.
March 2019	Number Theory Seminar, Universität Wien, Vienna, Austria.
March 2010	Representations of quantum affine algebras via cluster algebras.
February 2019	TENURE-TRACK TALK, UC RIVERSIDE, Riverside, USA.
rebruary 2019	Baxter relation, cluster algebras and quantum cluster algebras.
January 2019	SÉMINAIRE GROUPES, REPRÉSENTATIONS ET GÉOMÉTRIE, UNIVER-
January 2013	SITÉ PARIS-DIDEROT, Paris, France.
	Anneaux de Grothendieck quantiques et algèbres amassées quantiques.
December 2018	XXV Brazilian Algebra School, Campinas, Brazil.
Detember 2016	t-deformations of Grothendieck rings as quantum cluster algebras.
November 2018	Openseminar Algebra Universität zu Köln Cologno Cormony

OBERSEMINAR ALGEBRA, UNIVERSITÄT ZU KÖLN, Cologne, Germany.

 $t ext{-}deformations of Grothendieck rings as quantum cluster algebras.}$ 

November $2018$	AACHEN	UNIVERSITY,	Aachen,	Germany.
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Asymptotics of standard modules of quantum affine algebras.

November 2018 MATHEMATICAL PHYSICS SEMINAR, ETH, Zurich.

Quantum Grothendieck rings for quantum affine algebras.

June 2018 QUANTUM AFFINE ALGEBRAS, Washington DC, USA.

t-deformations of Grothendieck rings as quantum cluster algebras.

May 2018 UC RIVERSIDE, Riverside, USA.

Asymptotics of standard modules of quantum affine algebras.

January 2017 Geometry and Representation Theory, ESI, Vienna, Austria.

Quantum Grothendieck Rings and Baxter relations.

# Research visits

 $\mathbf{May} \ \ \mathbf{2018} \qquad \qquad \mathbf{UC} \ \mathbf{RIVERSIDE}, \ \mathbf{Riverside}, \ \mathbf{USA}.$ 

Visited Pr. Vyjayanthi Chari.

March – July 2015 Massachusetts Institute of Technology, Boston, USA.

Research internship in Mathematics. Advisor: Pr. Pavel Etingof.

# Teaching

2017 - 2019	Université Paris Diderot, Paris, France.
	<b>Teaching Assistant</b> in Mathematics, for second year B.Sc. students preparing for engineer schools.
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2016-2017	Université Paris Diderot, Paris, France.
	Teaching Assistant in Mathematics, for first year B.Sc. students ma-
	joring in Computer Science.
2013 - 2015	Lycée Saint Louis, Paris, France.
	Oral examiner in Mathematics.
2012 - 2015	Private lessons in mathematics for students from 7th grade to second
	year of B.Sc.

#### Administration

- · Member of the PhD Student Body at the Institut de Mathématiques de Jussieu-Paris Rive Gauche (IMJ-PRG).
- · Organizer of biannual meetings between graduate students and PhD students.
- · Member of the Gender Equality Committee of the IMJ-PRG.

# Languages

French: Native speaker.

English: Fluent.

Spanish: Good working knowledge.

### Interests and Activities

- $\cdot$  Sports: Basketball (University Championship), Scuba Diving (Open Water Diver), Cheerleading in ENS's squad, running.
- · Computer skills : good knowledge of Caml, Maple and LateX.