Léa BITTMANN

Oskar-Morgenstern-Platz 1 Date of birth: 26/12/1991 Vienna 1090, Austria Nationality: French and Phone: (+33) 6 75 29 59 01

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Education and Academic 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 na-	
	tional "Grandes Écoles" competitive exam.	
Publications		
November 2019	A quantum cluster algebra approach to representations of simply-laced quantum affine algebras, accepted in Mathematische Zeitschrift, preprint: arXiv:1911.13110.	

November 2019	A quantum cluster algebra approach to representations of simply-laced quantum affine algebras, accepted in Mathematische Zeitschrift, preprint: arXiv:1911.13110.
July 2019	PhD Thesis: Quantum Grothendieck rings, cluster algebras and quan-
v	tum affine category $\mathcal{O}$ .
February 2019	Quantum Grothendieck rings as quantum cluster algebras, in Journal
	of the London Mathematical Society.
<b>A</b> ugust 2018	Asymptotics of Standard Modules of Quantum Affine Algebras, in Al-
	gebras and Representation Theory.
September 2015	Master Thesis: Representations of the Yangian in Deligne's category
	$Rep(Gl_t)$ .

## Talks - Posters

November $2020$	Séminaire du LaCIM, Montréal, Zoom.
	Représentations des algèbres affines quantiques du point de vue des
	algèbres amassées quantiques.
November 2020	QUANTUM ALGEBRA DAYS, IMAG, Montpellier, Zoom.
	Anneaux de Grothendieck quantiques, vers les types non simplement
	$lac\'es$ .
$\mathbf{July}  2020$	Working group: Cluster algebras and quiver representa-
	Tions, IMJ-PRG, Paris, Zoom.
	Representations of quantum affine algebras, $\ell$ -fundamental and standard metals and standard metals are the standard metals and standard metals are the standard metals and standard metals are standard metals are standard metals and standard metals are standard metals and standard metals are standard metals are standard metals and standard metals are standard meta
	$dard\ modules.$

June 2020 ARTIN WORKSHOP, UNIVERSITY OF NOTTINGHAM, Zoom.

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

February 2020	COLLOQUE TOURNANT DU GDR TLAG, IHP, Paris, France.
	Représentations des algèbres affines quantiques du point de vue des
November 2019	algèbres amassées quantiques. Seminar "Representation Theory and Automorphic Forms",
November 2019	UNIVERSITÄT WIEN, Vienna, Austria.
	R-matrices and quantum groups.
$\mathbf{June} \ 2019$	CLUSTER ALGEBRA 2019, POSTER OF THE DAY, Kyoto, Japan.
	Quantum Grothendieck rings as quantum cluster algebras.
March 2019	Number Theory Seminar, Universität Wien, Vienna, Austria.
	Representations of quantum affine algebras via cluster algebras.
February 2019	TENURE-TRACK TALK, UC RIVERSIDE, Riverside, USA.
Innuary 2010	Baxter relation, cluster algebras and quantum cluster algebras.  Séminaire Groupes, Représentations et Géométrie, Univer-
January 2019	SITÉ PARIS-DIDEROT, Paris, France.
	Anneaux de Grothendieck quantiques et algèbres amassées quantiques.
December 2018	XXV Brazilian Algebra School, Campinas, Brazil.
	t-deformations of Grothendieck rings as quantum cluster algebras.
November 2018	OBERSEMINAR ALGEBRA, UNIVERSITÄT ZU KÖLN, Cologne, Ger-
	many.
	t-deformations of Grothendieck rings as quantum cluster algebras.
November 2018	AACHEN UNIVERSITY, Aachen, Germany.
November 2018	Asymptotics of standard modules of quantum affine algebras.  Mathematical Physics Seminar, ETH, Zurich.
November 2016	Quantum Grothendieck rings for quantum affine algebras.
June 2018	QUANTUM AFFINE ALGEBRAS, Washington DC, USA.
5 4116 2526	t-deformations of Grothendieck rings as quantum cluster algebras.
$\mathbf{May} \ 2018$	UC RIVERSIDE, Riverside, USA.
	$A symptotics \ of \ standard \ modules \ of \ quantum \ affine \ algebras.$
January 2017	GEOMETRY AND REPRESENTATION THEORY, ESI, Vienna, Austria.
	Quantum Grothendieck Rings and Baxter relations.
Research visits	
May 2018	UC RIVERSIDE, Riverside, USA.
Way 2016	Visited Pr. Vyjayanthi Chari.
March – July 2015	MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Boston, USA.
v	Research internship in Mathematics. Advisor: Pr. Pavel Etingof.
Teaching	
<u>reaching</u>	
m July~2020	ÉCOLE NORMALE SUPÉRIEURE ADMISSION EXAMINATION.
2010	Examiner for the <i>Mathématiques D</i> paper, Admission board.
2019 -	Lycée Français de Vienne, Vienna, Austria.
2017 - 2019	Occasional substitute teacher in senior and junior high school classes. UNIVERSITÉ PARIS DIDEROT, Paris, France.
2017 - 2019	Teaching Assistant in Mathematics, for second year B.Sc. students
	preparing for engineer schools.
${\bf 2016-2017}$	Université Paris Diderot, Paris, France.
	Teaching Assistant in Mathematics, for first year B.Sc. students
	majoring in Computer Science.
2013-2015	Lycée Saint Louis, Paris, France.
	Oral examiner in Mathematics.

## Administration

- · Reviewer for the following journals: Journal of the London Mathematical Society, Journal of Algebra, Algebra and Representation Theory and AMS Mathematical Reviews.
- · 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

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