

Léa Bittmann  
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Date of birth: 26/12/1991  
Nationality: French and  
Canadian

## Education and Academic career

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2021 –	<a href="#">UNIVERSITY OF EDINBURGH</a> , Edinburgh. <b>Research Associate</b> , working with Alexander Shapiro.
2019 – 2021	<a href="#">UNIVERSITÄT WIEN</a> , Vienna. <b>Postdoctoral Researcher</b> in the team of Anton Mellit.
2016 – 2019	<a href="#">UNIVERSITÉ PARIS DIDEROT</a> , Paris. <b>PhD in Mathematics</b> , Advisor: David Hernandez.
July 2016	<b>Agrégation de mathématiques</b> , French diploma for higher education teaching.
2015 – 2016	<a href="#">UNIVERSITÉ PIERRE ET MARIE CURIE</a> , Paris. <b>M.Sc. of teaching in Mathematics</b> , Summa cum Laude. Training for higher education teaching.
2014 – 2015	<a href="#">UNIVERSITÉ PARIS DIDEROT</a> , Paris, France. <b>M.Sc. in Fundamental Mathematics</b> , Summa cum Laude.
2012 – 2014	<a href="#">ÉCOLE NORMALE SUPÉRIEURE (ENS)</a> , Paris. First year of M.Sc. in Fundamental Mathematics. <b>B.Sc. in Mathematics</b> , with high honors.
2009 – 2012	<a href="#">LYCÉE DU PARC</a> , Lyon, France. Completed a three-year scientific program in preparation for the national “Grandes Écoles” competitive exam.

## Publications

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December 2020	<i>A quantum cluster algebra approach to representations of simply-laced quantum affine algebras</i> , in <a href="#">Mathematische Zeitschrift</a> .
July 2020	<i>Quantum Grothendieck rings as quantum cluster algebras</i> , in <a href="#">Journal of the London Mathematical Society</a> .
July 2019	PhD Thesis: <i>Quantum Grothendieck rings, cluster algebras and quantum affine category <math>\mathcal{O}</math></i> .
August 2018	<i>Asymptotics of Standard Modules of Quantum Affine Algebras</i> , in <a href="#">Algebras and Representation Theory</a> .
September 2015	Master Thesis: <i>Representations of the Yangian in Deligne’s category <math>\text{Rep}(Gl_t)</math></i> .

## Teaching

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July 2020	<a href="#">ÉCOLE NORMALE SUPÉRIEURE ADMISSION EXAMINATION</a> . <b>Examiner</b> for the <i>Mathématiques D</i> paper, Admission board.
2019 – 2020	<a href="#">LYCÉE FRANÇAIS DE VIENNE</a> , Vienna, Austria. Occasional substitute teacher in senior and junior high school classes.
2017 – 2019	<a href="#">UNIVERSITÉ PARIS DIDEROT</a> , Paris, France. <b>Teaching Assistant</b> in Mathematics, for second year B.Sc. students preparing for engineer schools.
2016 – 2017	<a href="#">UNIVERSITÉ PARIS DIDEROT</a> , Paris, France. <b>Teaching Assistant</b> in Mathematics, for first year B.Sc. students majoring in Computer Science.
2013 – 2015	<a href="#">LYCÉE SAINT LOUIS</a> , Paris, France. <b>Oral examiner</b> in Mathematics.

## Research visits

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- May 2018** [UC RIVERSIDE](#), Riverside, USA.  
Visited Pr. Vyjayanthi Chari.
- March – July 2015** [MASSACHUSETTS INSTITUTE OF TECHNOLOGY](#), Boston, USA.  
**Research internship** in Mathematics. Advisor: Pr. Pavel Etingof.

## Some talks

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- Décembre 2020** [QUANTUM GROUPS AND COHOMOLOGY THEORY OF QUIVER AND FLAG VARIETIES](#), CIRM, BBB.  
*Monoidal categorification of cluster algebra and quantum affine Schur-Weyl duality .*
- November 2020** [QUANTUM ALGEBRA DAYS](#), IMAG, Montpellier, Zoom.  
*Anneaux de Grothendieck quantiques, vers les types non simplement lacés.*
- June 2020** [ARTIN WORKSHOP](#), [UNIVERSITY OF NOTTINGHAM](#), Microsoft Teams.  
*t-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 algèbres amassées quantiques.*
- January 2019** [SÉMINAIRE GROUPES, REPRÉSENTATIONS ET GÉOMÉTRIE](#), [UNIVERSITÉ 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.*
- 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.*

## Administration

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- **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.