

# LI, YU

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## CONTACT INFORMATION

University of Chicago  
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Citizenship: Chinese

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## EDUCATION

<b>University of Chicago</b> Ph.D. (mathematics) Advisor: Victor Ginzburg	<i>2014 - 2021 (expected)</i>
<b>University of Hong Kong</b> B.Sc. (first class honors, mathematics)	<i>2011 - 2014</i>
<b>University of California at Berkeley</b> Exchange student	<i>Spring 2013</i>
<b>Zhejiang University</b> Preparation year	<i>2010 - 2011</i>

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## RESEARCH INTERESTS

Geometric representation theory; (derived) symplectic/Poisson geometry; deformation quantization; toric variety; cluster algebra; mathematical physics; combinatorics.

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## PUBLICATIONS

4. Li, Y.: *Wonderful Compactification of a Cartan Subalgebra of a Semisimple Lie Algebra*. In preparation, to be posted on the arXiv very soon.
3. S. Evens and Y. Li: *Abelian Ideals and the Variety of Lagrangian Subalgebras*. arXiv:2010.04358. Submitted.
2. Li, Y.: *Quantum Boson Algebra and Poisson Geometry of the Flag Variety*. arXiv: 1904.10141. Submitted to Representation Theory. <sup>1</sup>
1. Li, Y.: *Gaiottos Lagrangian Subvarieties via Loop Groups*. arXiv: 1705.01639. Submitted.

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## INVITED TALKS

7. Special session on “Geometric and Categorical Methods in Representation Theory”, AMS Sectional Meeting, May 2021, virtual meeting (originally at San Francisco State University);
6. February 2021, University of Toronto;
5. December 2020, the Chinese University of Hong Kong;
4. Geometry, Physics and Representation Theory Seminar, December 2020, Northeastern University;
3. Special session on “Supergeometry, Poisson Brackets, and Homotopy Structures”, AMS Sectional Meeting, September 2019, University of Wisconsin - Madison;
2. Cluster Algebra Seminar, January 2019, University of Notre Dame;

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<sup>1</sup>Review of the submitted manuscript is positive.

1. Geometry Seminar, August 2018, the University of Hong Kong.

## AWARDS

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8. Lawrence and Josephine Graves Prize for Excellence in Undergraduate Teaching, 2018, Department of Mathematics, University of Chicago;
7. Undergraduate Research Fellowship 2013, Faculty of Science, the University of Hong Kong;
6. Dean's Honors List, Spring 2013, College of Letters and Science, University of California at Berkeley;
5. Wong Yung Chow Prize in Mathematics, 2012 - 2013, Department of Mathematics, the University of Hong Kong;
4. C. V. Starr Scholarships 2012 - 2013;
3. Summer Research Fellowship 2012, Faculty of Science, the University of Hong Kong;
2. Dean's Honors List, 2011 - 2012, Faculty of Science, the University of Hong Kong;
1. Walter Brown Memorial Prizes in Mathematics, 2011-2012, Department of Mathematics, the University of Hong Kong.

## TEACHING

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1. MATH 15200, Calculus-2, autumn 2016, 2017, University of Chicago;
2. MATH 15300, Calculus-3, winter 2017, 2018, autumn 2019, 2020, University of Chicago;
3. MATH 19520, Mathematical Methods in the Social Sciences, spring 2017, the University of Chicago;
4. MATH 19620, Linear Algebra, spring and autumn 2018, winter 2019, winter 2020, University of Chicago;
5. MATH 27300, Basic Theory of Ordinary Differential Equations, (college fellow), winter 2016, University of Chicago;
6. MATH 27000, Basic Complex Variables, (college fellow), autumn 2015, spring 2016, University of Chicago;
7. MATH 1111, Linear Algebra, (teaching assistant), summer 2012, the University of Hong Kong.

## SERVICES

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1. Organizer, Student Poisson Geometry Seminar, 2018 - 2019, University of Chicago;
2. Organizer, Student Representation Theory Seminar, 2017 - 2018, University of Chicago;
3. Mentor, Directed Reading Program, autumn 2015, 2016, spring 2017, Department of Mathematics, the University of Chicago.

## CONFERENCES ATTENDED

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9. Special session on "Supergeometry, Poisson Brackets, and Homotopy Structures", AMS Sectional Meeting, September 2019, University of Wisconsin - Madison;
8. Modern Trends in Non-commutative Geometry, May 2019, Northwestern University;
7. Thematic Program on Geometric Representation Theory and Symplectic Varieties, June 2018, University of Notre Dame;
6. Interactions between Representation Theory and Algebraic Geometry, August 2017, the University of Chicago;

5. Hodge Theory, Moduli and Representation Theory, August 2017, Stony Brook University;
4. Derived Algebraic Geometry and Interactions, June 2017, Institut de Mathématiques de Toulouse;
3. Local and Global Methods in Algebraic Geometry, May 2016, University of Illinois at Chicago;
2. Workshop on Complex Geometry, July 2015, the University of Hong Kong;
1. Midwest Algebraic Geometry Graduate Conference, April 2015, University of Illinois at Chicago.

## **LANGUAGES AND SKILLS**

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1. Chinese, native;
2. English, fluent;
3. LaTeX, proficient;
4. Macaulay2, proficient;
5. SageMath, proficient;
6. Matlab, familiar;