

Fei Ye

Curriculum Vitae

Dept. of Math. and Comp. Sci.
QCC-CUNY
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Education

- 2006-2011 **Ph.D.**, *University of Illinois at Chicago, USA*, Mathematics.
◊ Advisor: Stephen S.T. Yau
- 2002-2006 **Ph.D.**, *East China Normal University, China*, Mathematics.
- 1998-2002 **B.S.**, *Guangzhou University, China*, Mathematics.

Professional Experiences

- 2015-Present **Assistant Professor**, *Department of Mathematics and Computer Science, Queensborough Community College-CUNY, New York.*
- 2012-2015 **IMR Postdoc Fellow**, *Department of Mathematics, The University of Hong Kong, Hong Kong.*
◊ Advisor: Ngaiming Mok
- 2011-2012 **ENI Postdoc Fellow**, *Emmy Noether Research Institute for Mathematics, Bar-Ilan University, Israel.*
◊ Advisor: Mina Teicher

Research Interests

Algebraic Geometry, Complex Geometry, Commutative Algebra

Papers

Accepted/Published

- 1 Sakai's theorem for \mathbb{Q} -divisors on surfaces and applications. (with Tong Zhang and Zhixian Zhu), *Asian Journal of Mathematics*, Special Issue, accepted, 2017
- 2 Global Generation of Adjoint Line Bundles on Projective 5-folds (with Zhixian Zhu), *Manuscripta Mathematica*, Vol. 153 (3-4), 545-562, 2017.
- 3 On Lower Bounds of Slopes of Totally Ramified Triple Cover Fibrations, (with Pan Liu and Jun Lu), *Asian Journal of Mathematics*, Vol. 21 (5), 981 – 994, 2017.
- 4 Combinatorial symmetry of line arrangements and applications (with Meirav Amram, Moshe Cohen, Hao Sun, Mina Teicher, Anna Zarkh), *Topology and Its Applications*, Vol. 193, 226-247, 2015.
- 5 Several Splitting Criteria for Vector Bundles and Reflexive Sheaves (with Stephen S.T. Yau), *Pacific Journal of Mathematics*, Vol.266 (2), 449-456, 2013.

- 6 Classification of Moduli Spaces of Arrangements of 10 Projective Lines with a Quadruple point (with Meirav Amram and Mina Teicher), *Advances in Applied Mathematics* Vol. 51, 392-418, 2013.
- 7 Classification of Moduli Spaces of Arrangements of 9 Projective Lines, *Pacific Journal of Mathematics*, Vol.265 (1), 243-256, 2013.
- 8 A Note on The Topology of The Complements of Fiber-type Line Arrangements in $\mathbb{C}P^2$ (with Sheng-Li Tan and Stephen S.T. Yau), *Pacific Journal of Mathematics*, Vol. 251 (1), 207-218, 2011.
- 9 Diffeomorphic Types of Complements of Nice Arrangements in $\mathbb{C}P^l$ (with Stephen S.T. Yau), *Science in China, Series A: Mathematics*, Vol. 52 (12), 2774-2791, 2009.

Preprint for Publication

- 1 On Fujita's Freeness Conjecture in Dimension 5. (with Zhixian Zhu), arXiv:1511.09154, 2015.
- 2 Moduli Spaces of Ten-line Arrangements with Double and Triple Points (with Meirav Amram, Moshe Cohen and Mina Teicher), arXiv:1306.6105, 2013.

Talks

- 1 Application of Multiplier Ideals to Geometry and Algebra of Adjoint Line Bundles, Dynamic System and Algebraic Geometry Workshop, Zhejiang University, Hangzhou, China, January 1, 2018
- 2 Multiplier Ideals and Applications to Adjoint Line Bundles, Commutative Algebra & Algebraic Geometry Seminar, CUNY Graduate Center, New York City, October 20, 2017.
- 3 A characterization of big \mathbb{Q} -divisors on surfaces and its applications, Commutative Algebra & Algebraic Geometry Seminar, CUNY Graduate Center, New York City, March 3, 2017.
- 4 A non-vanishing theorem for big divisors on surfaces and its applications, Geometry Seminar, University of Hong Kong, Hong Kong, July 6, 2016.
- 5 On base point freeness of adjoint linear systems on projective 5-folds, Jinan University, Guangzhou, July 1, 2016.
- 6 Okounkov bodies: introduction I & II, Study group on Toric and Spherical Varieties, CUNY Graduate Center, New York, April 4 and 11, 2016
- 7 Fujita's Freeness Conjecture on 5-folds, Workshop on Complex Geometry, University of Hong Kong, Hong Kong, July 23, 2015.
- 8 Rational Curves on CP-Manifolds, Working Seminar on Several complex variables and Complex geometry, University of Hong Kong, March 27, 2015
- 9 Mori Contractions on CP-Manifolds, Working Seminar on Several complex variables and Complex geometry, University of Hong Kong, February 9, 2015
- 10 Mori's Theorems on Rational Curves, Working Seminar on Several complex variables and Complex geometry, University of Hong Kong, January 5, 2015

- 11 Rational Curves on Fano Manifolds with Nef Tangent bundles, Working Seminar on Several complex variables and Complex geometry, University of Hong Kong, February 2, 2015
- 12 Effective Freeness of Adjoint Linear Systems on 5-folds, East China Normal University, Shanghai, September 22, 2014.
- 13 Classification of Arrangements of 10 Lines, Complex Geometry, National University of Singapore, Singapore, July 26, 2013.
- 14 Global Generation of Adjoint Line Bundles, Young Mathematician Workshop on Arithmetic Algebraic Geometry, East China Normal University, Shanghai, July 9, 2013.
- 15 Some Splitting Criteria for Vector Bundles and Reflexive Sheaves, The Hong Kong Mathematical Society Annual General Meeting 2013, Hong Kong, June 8, 2013.
- 16 Mori's existence theorem on rational curves, Working Seminar on Complex Geometry, the University of Hong Kong, Hong Kong, March 5, 2013.
- 17 Hirzebruch's Construction of Ball Quotient Surfaces, Working Seminar on Complex Geometry, the University of Hong Kong, Hong Kong, February 4, 2013.
- 18 Effective Freeness of Adjoint Linear Systems, Mini Workshop on Complex Geometry, the University of Hong Kong, Hong Kong, January 10, 2013.
- 19 Irreducibility of Moduli Spaces of Line Arrangements, Geometry Seminar, The University of Hong Kong, Hong Kong, July 24, 2012.
- 20 Topology of Moduli Spaces of Arrangements of Hyperplanes, Emmy Noether Seminar/Geometry Seminar, Bar-Ilan University, Israel, November 23, 2011.

Awards/Honors

- 2017 PSC-CUNY Research Award Cycle 48
- 2016 PSC-CUNY Research Award Cycle 47
- 2015 HKU Small Project Fund

Professional Service

Seminar/Workshops Organized

- September, 2017-Present **Study Group on Hodge Theory and Complex Algebraic Geometry**, *CUNY Graduate Center*, co-organized with Professor Bart Van Steirteghem.
- July 20-22, 2015 **Workshop on Complex Geometry**, *University of Hong Kong*, co-organized with Professor Ngaiming Mok.
- January 22, 2015 **Mini Workshop on Algebraic Geometry**, *University of Hong Kong*, co-organized with Professor Ngaiming Mok.
- 2011-2012 **Emmy Noether Seminar / Geometry Seminar**, *Bar-Ilan University*, co-organized with Dr. Moshe Cohen and Professor Mina Teicher.

Spring 2012 **Emmy Noether Institute Graduate Seminar**, *Bar-Ilan University*, co-organized with Dr. Moshe Cohen, Professor Mina Teacher and Ms. Anna Zarkh.

[Mathematical Reviewing Service](#)

2012-Present Reviewer for Zentralblatt MATH

2011-Present Reviewer for Mathematical Reviews

[Departmental Service](#)

2017 **Technology And E-Resources Committee**, *Member*.
Fall-Present

2015 **Professional Development Committee**, *Co-organizing department colloquium/seminar*, (chair for the academic year 2016-2017).

2016-2017 **Course Coordinator**, *Calculus II*.

2015-2016 **Course Coordinator**, *Linear Algebra*.

[Teaching Experiences](#)

Spring 2017 Instructor, Queensborough Community College.
College Algebra, Elementary Statistics

Fall 2017 Instructor, Queensborough Community College.
College, Honors Calculus I

Spring 2017 Instructor, Queensborough Community College.
College Algebra, Trigonometry

Fall 2016 Instructor, Queensborough Community College.
Elementary Algebra

Spring 2016 Instructor, Queensborough Community College.
Calculus II, College Algebra

Fall 2015 Instructor, Queensborough Community College.
Calculus I, College Algebra, Elementary Algebra

Spring 2015 Instructor, the University of Hong Kong.
Analysis II

Spring 2014 Co-Instructor, the University of Hong Kong.
Complex Manifolds

Spring 2014 Co-Instructor, the University of Hong Kong.
Mathematics Seminar
This is a seminar style course for undergraduate students

Spring 2013 Instructor, the University of Hong Kong.
Algebraic Surfaces

Spring 2013 Mentor, the University of Hong Kong.
Direct Studies in Mathematics
This is a course for undergraduate Students who would like have an experience on independent study