

Curriculum Vitae

Xuqiang Qin

Department of Mathematics,
The University of North Carolina at Chapel.
329 Phillips Hall, Chapel Hill, NC 27599.

Email: qinx@unc.edu

Website: qinxuqiang.github.io

Research Interests

- Algebraic Geometry-derived categories, stability conditions, Lagrangian fibrations, quiver representations.

Employment

- University of North Carolina at Chapel Hill 08/2020 -08/2023
Postdoctoral Research Associate
Mentor: Justin Sawon

Education

- PhD in Mathematics, 08/2013-07/2020
Indiana University Bloomington.
Advisor: Valery Lunts.
- BSc in Mathematics, 08/2009-05/2013
Chinese University of Hong Kong.

Publications and Preprints

1. *Birational geometry of the Mukai systems of rank three and genus two*, (joint with Justin Sawon), in preparation.
2. *Bridgeland stability of minimal instanton bundles on Fano threefolds*, arXiv:2105.14617
3. *Compactification of the moduli space of minimal instantons on the Fano threefold V_4* , European Journal of Mathematics, **7** (2021), 1502 – 1523.
4. *Compactification of the moduli space of instanton sheaves on the Fano threefold V_5* , Journal of Pure and Applied Algebra, DOI: 10.1016/j.jpaa.2020.106526
5. *Moduli of quiver representations for exceptional collections on surfaces*, (joint with Shizhuo Zhang), arXiv:1803.06533, submitted.
6. *Blow ups of \mathbf{P}^n as quiver moduli for exceptional collections*, arxiv: 1804.09544

Invited Talks

- *Compactification of the moduli space of minimal instantons on the Fano threefold V_4 , Geometric Methods in Representation Theory Seminar, UNC Chapel Hill, 2021.*
- *Moduli space of instanton sheaves on the Fano 3-fold V_4 , Graduate Algebraic Geometry Seminar, Indiana University, Sep 2019.*
- *Moduli spaces of quiver representations for exceptional collections on surfaces, Algebra Seminar, Indiana University, Feb 2018.*
- *Holomorphic line bundles and Jacobian, Graduate Students Geometry Seminar, Indiana University, November 2017.*

Recent Conferences and Workshops

- Derived Categories, Moduli Spaces, and Hyperkähler Varieties, UMich, 2022.
- Derived Categories and Moduli Spaces, Cornell University, 2022.
- FRG Workshop on Stability, Moduli Spaces and Applications, UIC, 2019.
- I-70 Algebraic Geometry Symposium, WUSTL, 2019.
- Facets of Algebraic Geometry, UMich, 2019.
- AMS Fall Central Sectional Meeting, UW Madison, 2019.
- International Workshop on Derived Categories and Related Topics, SYSU China, 2019.
- Young Mathematicians Academic Forum - Sminaire Mathjeunes, UTSC China, 2019.
- Midwest Algebraic Geometry Graduate Conference, UIC, 2019.

Awards and Grants

- Hazel King Thompson Fellowship, Indiana University, Spring 2019.
- Hazel King Thompson Fellowship, Indiana University, Summer 2018.
- Hazel King Thompson Fellowship, Indiana University, 2013-2014

Teaching Record

University of North Carolina at Chapel Hill

- MATH233 Calculus of Functions of Several Variables, Honors section, Spring 2022.
- MATH318 Discrete Mathematics, Spring 2022.
- MATH318 Discrete Mathematics, Fall 2021.
- MATH318 Discrete Mathematics, Spring 2021.
- MATH318 Discrete Mathematics, Honors section, Fall 2020.

Indiana University:

- V119 Applied Brief Calculus, Spring 2020.
- V119 Applied Brief Calculus, Fall 2019.
- M118 Finite Math, Summer 2017.

Mentoring (REU)

- William Hargis, Fall 2016. Topic: Introduction to representation theory.

Last update: Mar 2022.