

Curriculum vitæ

Zhi Jiang

Contact

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Employment

09/2011-present Assistant professor (tenured) at Université Paris-Sud 11.

09/2010-08/2011 Visiting member of Max Planck Institute for Mathematics.

Fellowships and awards

2010 Chinese government award for outstanding self-financed students abroad.

2007 Silver prize of Master Thesis Award in the Fourth International Congress of Chinese Mathematicians (ICCM 2007).

Education

2007.9-2010.5 Ph.D student at Université Paris 7.
Title : Around the Albanese map of algebraic varieties and on the nef cone of symmetric products of curves.
Advisor : Olivier Debarre
Grade : Highest Honors.

2005.9-2007.7 Master 2 at Université Paris 6.
Master 2 memoir : On the restriction of holomorphic forms.
Advisor : Claire Voisin.

2004.9- Bachelor and Master 1 at ENS Paris and Université Paris 7.
2005.7 **Master 1 memoir** : Théorème d’Ax et Kochen.
Advisor : François Loeser.

2001.9- Undergraduate student of mathematics at Tsinghua University (Beijing).
2004.7

Publications

- [15] Rational cohomology tori, (with O. Debarre and M. Lahoz, with an Appendix by W. Sawin), arXiv :1509.01043.
- [14] A pluricanonical reduction principle on projective varieties of general type (with M. Chen), submitted, arXiv : 1504.03939.
- [13] Positivity in varieties of maximal Albanese dimension (with J.A. Chen), to appear in Crelle, arXiv :1311.4316.
- [12] Unboundedness of fiber invariants of canonically fibred varieties of general type (with M. Chen), *Bulletin of the London Math. Soc.* **46** (2014), 1183–1188.
- [11] Characterization of products of theta divisors (with M. Lahoz and S. Tirabassi), *Compos. Math.* **150** (2014), no. 8, 1384–1412.
- [10] Pseudo-effective classes and pushforwards (with O. Debarre and C. Voisin), *Pure Appl. Math. Q.* **9** (2013), 64–664.
- [9] On 6-canonical map of irregular threefolds of general type (with J.A. Chen and M. Chen), *Math. Res Lett.* **20** (2013), 33–39.
- [8] Cohomological support loci of varieties of Albanese fiber dimension one (with H. Sun), *Trans. Amer. Math. Soc.* **367** (2015), 103–119.
- [7] On the Iitaka fibration of varieties of maximal Albanese dimension (with M. Lahoz and S. Tirabassi), *Int. Math. Res. Not.* (2013), no. **13**, 2984–3005.
- [6] Varieties with vanishing holomorphic Euler characteristic (with J.A. Chen and O. Debarre), *J. reine angew. Math.* **691** (2014), 203–227.
- [5] A Noether-Lefschetz theorem for varieties of r -planes in complete intersections, *Nagoya Math. J.* **206** (2012), 39–66.
- [4] On varieties of maximal Albanese dimension, *Manuscripta Math.* **138** (2012), 203–219.
- [3] Varieties with $q(X) = \dim X$ and $P_2(X) = 2$, *Ann. Sc. Norm. Super. Pisa Cl. Sci.*, Vol.**XI**, issue 2 (2012), 243–258.
- [2] An effective version of a theorem of Kawamata on the Albanese map, *Commun. Contemp. Math.* **13** (2011), no. 3, 509–532.

[1] On the restriction of holomorphic forms, *Manuscripta Math.* **124** (2007), 173–182.

Long-term Invitations

- Oct, 2014** ETSEIB-UPC, Barcelona, Spain.
Aug, 2014 Fudan University, Shanghai, China.
Aug, 2013 Fudan University, Shanghai, China.
Jun, 2013 National Taiwan University, Taipei, Taiwan.
Dec, 2012 Fudan University, Shanghai, China.
Apr, 2012 National Taiwan University, Taipei, Taiwan.
Aug, 2011 Beijing International Center for Mathematical Research, Beijing, China.
May, 2011 Institut Fourier Grenoble, Grenoble, France.
Aug, 2010 Beijing Morningside center, Beijing, China.

Selected talks at seminars and conferences

- On projective varieties of large canonical volumes, Barcelona, 2014; Lille, 2015.
- Positivity in varieties of maximal Albanese dimension, Conference Positivity, Vanishing Theorems, and Applications, Lille, 2014; Workshop on algebraic geometry, Chengdu China, 2014.
- Pseudo-effective classes and push-forward, Conference CRM Montreal "Rational Points, Rational Curves and Entire Holomorphic Curves on Projective Varieties", 2013; Summer Workshop on Arithmetic Geometry, Beijing, 2013.
- Birational characterization of products of theta divisors, Conference GRIFGA Strasbourg, 2013; Institut Fourier Grenoble, 2013; Cambridge, 2013.
- Pluricanonical systems of varieties of maximal Albanese dimension, IMJ Paris, 2012; NTU Taipei, 2012.
- Abundance for slc pairs (after Fujino, Gongyo), Workshop on abundance conjecture, Toulouse, 2012.
- On the birational geometry of varieties of maximal Albanese dimension, IRMAR Rennes, 2011; SAGA Paris-Sud 11, 2012; Fudan University, 2012.
- Varieties of vanishing holomorphic Euler characteristic, BICMR Beijing, 2011.
- A Noether-Lefschetz theorem for varieties of r -planes, Rencontre annuelle du GDR Géométrie algébrique et géométrie complexe, CIRM, 10-14 janvier 2011.
- An effective version of a theorem of Kawamata on the Albanese map and its application, IMJ Paris, 2009; Laboratoire Paul Painlevé, 2010, Institut Fourier Grenoble, 2010, Morningside center Beijing, 2010.

Service

Referee for : Annales de l'Institut Fourier, Mathematische Zeitschrift, Journal of the London
Mathematical Society, Proceedings of the London Mathematical Society.
Reviewer for : MathSciNet, Zentralblatt Math.