

Jinwon Choi

Contact Information

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Personal Information

Citizenship: Republic of Korea

Education

- Ph.D.** Mathematics, University of Illinois, USA, 2012 (to be expected)
Thesis advisor : Sheldon Katz
Thesis title : Enumerative invariants for local Calabi-Yau threefolds
- M.A.** Mathematics, Seoul National University, Korea, 2003-2005 (Degree not earned)
Advisor : Young-Hoon Kiem
- M.A.** Economics, Seoul National University, Korea, 1999-2001
- B.A.** Economics (Minor: Mathematics), Seoul National University, Korea, 1995-1999

Research Interests

Algebraic Geometry, Enumerative Geometry, Moduli of Sheaves, Gromov-Witten Theory, Donaldson-Thomas Theory, Combinatorics

Publications

1. Jinwon Choi, Genus zero BPS invariants for local \mathbb{P}^1 , arXiv:1106.4616, submitted.
2. Jinwon Choi, Toward the virtual motive of the moduli space of sheaves on \mathbb{P}^2 , in preparation.

Honors

1. NSF Research Assistantship, Summer 2007 - Fall 2008, Spring 2009, Fall 2010 - Fall 2011.
2. Brain Korea Research Fellowship, 2003 - 2005.
3. Kumho Scholarship, Kumho Asiana Group, Korea, 1995-1999.

Talks and Presentations

1. Equivariant sheaves on a toric variety, Seoul National University, December 5, 2011.
2. On the moduli space of sheaves of dimension one on local \mathbb{P}^1 , Algebraic geometry seminar, Seoul National University, December 6, 2011.
3. On the moduli space of sheaves of dimension one on local \mathbb{P}^1 , Algebraic geometry seminar, University of Illinois, September 13, 2011.
4. Toward the virtual motive of the moduli space of sheaves on \mathbb{P}^2 , Midwest Algebraic Geometry Graduate Conference, University of Wisconsin-Madison, October 23-24, 2010.
5. Equivariant cohomology and localization, Graduate student Algebraic Geometry seminar, University of Illinois, September 17, 2008.
6. Gromov-Witten theory and Donaldson-Thomas theory, Seminar on sheaves of dimension 1, University of Illinois, September 26, 2008.
7. Seminar on geometric invariant theory, Seoul National University, Weekly talks over the semester, Fall 2004.
8. Seminar on Mumford's Algebraic Geometry book, Seoul National University, Biweekly talks over the semester, Spring 2004.

Invitations and Visits

1. Wall-crossing in Mathematics and Physics, University of Illinois, Urbana, IL, May 24-28, 2010.
2. Midwest Algebraic Geometry Graduate Conference, University of Wisconsin, Madison, WI, October 23-24, 2010.
3. RTG Graduate Summer School: Geometry of Quantum Fields and Strings, University of Pennsylvania, PA, June 8-20, 2009.
4. Representation theory, geometry, and combinatorics: Equivariant algebraic geometry and related topics, University of California, Berkeley, CA, May 26-29, 2009.
5. Analytic aspects of multiplier ideals, follow-up to the 2008 PCMI Graduate Summer School, Ohio State University, OH, May 11-15, 2009
6. 2009 Spring AMS Central Sectional Meeting, Department of Mathematics, University of Illinois, Urbana, IL, March 27-29, 2009
7. Modern Moduli Theory, MSRI, Berkeley, CA, February 23-27, 2009
8. Classical Algebraic Geometry Today, MSRI, Berkeley, CA, January 26-30, 2009
9. PCMI Graduate Summer School, Analytic and Algebraic Geometry: Common Problems - Different Methods, Park City, Utah, July 2008.
10. Algebraic geometry summer school, Hodge Theory and its Related Topics, ByeonSan, Korea, June 2003.

Teaching Experience

1. Problem Session for Algebraic Geometry II, Fall 2010.
2. Teaching Assistant, Calculus for Business, University of Illinois, Spring 2010, Fall 2006.
3. Teaching Assistant, Calculus III, University of Illinois, Fall 2009.
4. Teaching Assistant, Calculus II, University of Illinois, Spring 2008.
5. Teaching Assistant, Linear Algebra, Seoul National University, Fall 2003.
6. Teaching Assistant, Calculus I and II, Seoul National University, Spring 2003 - Spring 2005.
7. Instructor, Calculus and Statistics for financial risk managers, Internet course for general public, Spring 2002.
8. Instructor, Calculus and Topology for Microeconomic theory, Seoul National University, 2000.

Professional Experience

1. Organizer, Graduate student algebraic geometry seminar, University of Illinois, Fall 2008.
2. Organizer, Seminar on sheaves of dimension one, University of Illinois, Fall 2008.