Garrett Alston

Contact Information	Department of Mathematics The University of Oklahoma Norman, OK 73019-3103 galston@math.ou.edu http://www2.math.ou.edu/~galston

Research Interests

Symplectic Geometry, Contact Geometry, Hamiltonian Dynamics, Quantum Mechanics

Education

University of Wisconsin-Madison, Madison, Wisconsin

Ph.D. in Mathematics, June 2010
- Advisor: Yong-Geun Oh
- Thesis Title: Floer cohomology of real Lagrangians in the Fermat quintic 3-fold

M.S. in Mathematics, June 2009

University of Chicago, Chicago, IL

B.A. in Mathematics, June 2001

Employment

The University of Oklahoma, Norman, Oklahoma

Visiting Assistant Professor, Fall 2014-present

Chinese University of Hong Kong, Hong Kong

Postdoctoral Fellow, Fall 2013-Spring 2014

Kansas State University, Manhattan, Kansas

I-Center Postdoctoral Fellow, Fall 2010-Summer 2013

Grants, Awards and Honors

- NSF-DMS award 1108397, research grant, Fall 2011-Summer 2013
- NSF-DMS award 1137506, joint with Yan Soibelman, conference grant, conference date November 3-6, 2011
- NSF VIGRE Fellowship Summer 2008, Spring 2009, Summer 2009, Summer 2010.

Publications

Exact, graded, immersed Lagrangians and Floer theory, arXiv:1407.3871, joint with Erkao Bao, accepted in the Journal of Symplectic Geometry.

Floer cohomology of immersed spheres in smoothings of A_n surfaces, arXiv:1311.2327

Floer cohomology of real Lagrangians in the Fermat quintic threefold, arXiv:1010.4073.

Floer cohomology of torus fibers and real lagrangians in Fano toric manifolds, joint with Lino Amorim, Int. Math. Res. Not. IMRN 2012, no. 12, 2751V2793; arXiv:1003.3651.

Lagrangian Floer homology of real projective space and the Clifford torus in odd dimensions, Journal of Symplectic Geometry, 2011, Volume 9 Issue 1; arXiv:0902.0197.

- SYZ and Mirror Symmetry Mini-Workshop, Harvard Center of Mathematical Sciences and Applications, November 28, 2016.

- Center for Geometry and Physics Seminar, Institute of Basic Science, POSTECH, Korea, June 18, 2015.

- Hong Kong Geometry Colloquium, Chinese University of Hong Kong, January 10, 2015.

- Colloquium, Iowa State University, October 28, 2014.

- East Asian Symplectic Conference 2013, Kagoshima University, Japan, September 18-23, 2013.

- Karcher Colloquium, University of Oklahoma, March 14, 2013.

- Symplectic Geometry Seminar, Columbia University, April 27, 2012.

- Special Session on Mirror Symmetry, University of Kansas, March 30-April 1, 2012.

- Symplectic Geometry Seminar, Vanderbilt University, March 27, 2012.

- Conference on Homological Mirror Symmetry, University of Miami, January 23-27, 2012.

- Workshop on Symplectic Field Theory V, Universitat Hamburg, Hamburg, Germany, August 20-26, 2011.

- Sixth Pacific Rim Conference on Complex Geometry, Korea Institute for Advanced Study, Gyeong Ju, Korea, August 8-12, 2011.

- Georgia Topology Conference, University of Georgia, May 18-22, 2011.

- International Conference on Mirror Symmetry and Gromov-Witten Theory, Seoul National University, Seoul, Korea, January 11-15, 2010.

Teaching Experience

The University of Oklahoma

- Calculus I, Fall 2014

- Calculus II, Fall 2014, Spring 2015, Fall 2015

- Linear Algebra Spring 2016

- Differential Equations Fall 2016, Spring 2017

Chinese University of Hong Kong

- Seminar for Undergraduate Math Majors, Spring 2014

Kansas State University

- Elementary Geometry for Elementary Ed Majors, Fall 2010, Fall 2012, Spring 2013

- Topics Course: Kähler Geometry, Spring 2012

- Topics Course: Symplectic Geometry, Fall 2011

- Matrix Theory, Summer 2011

- Business Calculus I, Spring 2011, Fall 2011

University of Wisconsin-Madison

- College Algebra, Fall 2006, Fall 2006

- TA, Calculus II for Social Sciences, Fall 2007, Fall 2008.

- Trigonometry, Spring 2007.

- TA, Calculus II, Spring 2006.

- TA, Calculus I, Fall 2005.

ACTIVITIES

- Referee for Transactions of the American Mathematical Societry, Journal of Differential Geometry, Journal of Symplectic Geometry, Turkish Journal of Mathematics.

- Mentored one undergraduate in Spring 2012 as part of Kansas State I-Center Scholar program

- Organizer for Mirror Symmetry in the Midwest conference, Kansas State University, November 3-6, 2011.

- Mentored one undergraduate in Fall 2011 as part of Kansas State I-Center Scholar program

- Mentored two undergraduates in Summer 2011 as part of Kansas State REU

- Topology and Geometry summer review class for graduate students, Summer 2008 and 2009

- Co-organizer for Great Lakes Geometry Conferece, University of Wisconsin, Madison, April 10-11, 2010.

- Co-organizer for Graduate Student Topology and Geometry Conference, Univeristy of Wisconsin-Madison, 2009.

- Organizer for Fall 2006 Graduate Student Topology Seminar, University of Wisconsin-Madison.

COMPUTER SKILLS

- Sage, MATLAB, SciLab, Macauley, Magma, Java, C/C++, Visual Basic, Cache, SQL.