

## JONATHAN D. WILLIAMS - CURRICULUM VITAE

### Personal

*Born:* April 29, 1981

*Citizenship:* United States

### Contact

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### Education

*2003–present:*

Ph.D. student, Dept. of Mathematics, University of Texas at Austin.

- Ph.D., University of Texas at Austin, 2010 (expected)
- Supervisor: Prof. R. Gompf.
- Thesis: Broken Lefschetz fibrations on smooth 4-manifolds.

*1999–2003:*

Undergraduate, The University of Texas at Austin. B.S. Pure Mathematics, 2003 (with honors).

### Research Interests

Low-dimensional topology, smooth 4-manifolds, symplectic topology.

### Papers

*The h-principle for broken Lefschetz fibrations.* Submitted. ArXiv:0905.0502

### Honors and Awards

- Departmental Fellowship, University of Texas at Austin, Summer 2004, Spring 2008.
- Graduate Research Assistant (DMS-0636643) under Dr. Robert Gompf (2007, 2008, 2009).

### Talks

- (invited) Introductory talk for “Distinguished Women in Mathematics Horton-Jacobs lecture” by Dusa McDuff, October 2009.
- “Invariants of 3- and 4-manifolds from stable maps.” UT-Austin graduate topology seminar, September 2009.
- “Stable maps and a conjecture about smooth 4-manifolds.” UT-Austin graduate geometry seminar, September 2008.
- Revived and organized a moribund weekly graduate geometry seminar. UT-Austin, Fall 2008.
- “Introduction to Khovanov homology.” Winter School on Knot Theory and Representations, UT-Austin, January 2007.
- “Circle-valued morse functions and the Seiberg-Witten invariant.” UT-Austin graduate mathematics seminar, March 2006.

### Teaching

- Instructor for precalculus (2 semesters).
- Teaching assistant for linear algebra, applied linear algebra, differential equations and calculus (multiple semesters).
- Grader for an advanced algebraic topology subject course (2 semesters).