

# Jacob A. Rasmussen

## CURRICULUM VITAE

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PERSONAL: Born April, 1976, in Providence, RI.  
U.S. Citizen.

### EDUCATION:

**Harvard University**, 1998–2003.

Thesis title: *Floer homology and knot complements*.

Advisor: Peter Kronheimer.

**Princeton University**, 1994–8.

A.B. in Mathematics, *summa cum laude*, June 1998.

Class of 1998 Latin Salutatorian.

### EMPLOYMENT:

2007– University Reader, University of Cambridge.

2007–8 Visiting Associate Professor, Princeton University.

2005–7 Assistant Professor, Princeton University.

2003–5 Veblen Research Instructor, Princeton University/IAS.

### FELLOWSHIPS AND GRANTS:

Sloan Fellowship 2007–2008.

NSF Grant DMS-0603940, 2006–2009.

NSF Postdoctoral Fellowship, 2003–2006.

Clay Liftoff Mathematician, summer 2003

DOD Graduate Fellowship, 1998–2001.

Barry M. Goldwater Scholar, 1996–8.

### RESEARCH INTERESTS:

Gauge theoretic invariants and low dimensional topology. Connections with knot theory and symplectic and contact geometry. Khovanov homology.

## PUBLICATIONS:

(with P. Ozsváth and Z. Szabó) Odd Khovanov homology, *submitted*.

Lens space surgeries and L-space homology spheres, *preprint*.

Some differentials on Khovanov-Rozansky homology, *submitted*.

Khovanov-Rozansky homology of two-bridge knots and links, *Duke Math.*

*Journal*, **136** (2007), 551-583.

(with N. Dunfield and S. Gukov) The superpolynomial for knot homologies,

*Experimental Mathematics* **15** (2006), 129-161.

Knot homologies, in *Geometry and Topology of Manifolds* (Boden *et al.* eds.),

Fields Institute Communications **47** (2005), 261-280. Providence, RI: AMS.

Khovanov homology and the slice genus, to appear in *Inventiones Mathematicae*.

Lens space surgeries and a conjecture of Goda and Teragaito,

*Geometry and Topology* **8**(2004), 1013-1031.

Floer homology of surgeries on two-bridge knots,

*Algebraic and Geometric Topology* **2**(2002), 757-89.