

Yakov (Yasha) Savelyev

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PERSONAL

Born: January 17, 1980, Moscow, Russia.
Citizenship: USA, Russia

EDUCATION

Ph.D. SUNY Stony Brook, August 2008
Ph.D Advisor: Dusa McDuff
B.S. Mathematics, SUNY Stony Brook, 2002

APPOINTMENTS

Visiting Assistant Professor, University of Massachusetts, Amherst 2008- 2011
Postdoctoral Fellow, MSRI, spring 2010
Postdoctoral Fellow CRM-Montreal, current

PUBLICATIONS, PREPRINTS AND WORKS IN PROGRESS, (LINKS AVAILABLE ON MY WEBSITE)

Quantum characteristic classes and the Hofer metric, Geometry & Topology, 12 (2008), pp. 2277–2326.

Virtual Morse theory on $\Omega\text{Ham}(M, \omega)$, J. Differ. Geom., 84 (2010), pp. 409–425.

Bott periodicity and stable quantum classes, 2012 Selecta Math. N.S., DOI: 10.1007/s00029-012-0101-7

Gromov K-area and jumping curves in \mathbb{CP}^n , 2012, Algebraic and Geometric Topology, accepted for publication

Spectral geometry of the group of Hamiltonian diffeomorphisms, preprint, 2011

On configuration spaces of stable maps, 2011, preprint

Proof of the index conjecture in Hofer geometry, 2012, Math. Res. Letters, to appear

Floer-Fukaya theory and topological elliptic objects, 2012, preprint

On the injectivity radius in Hofer geometry, with Francois Lalonde, in preparation

Hofer geometry via quantization and spin geometry, with Egor Shelukhin, in progress

SERVICE

Referee for mathematical journals. Co-organizer for symplectic geometry seminar at CRM-Montreal.

FELLOWSHIPS AND AWARDS

Department research award, 2006 Stony Brook
Department travel grant, 2007 Stony Brook
Chair's award for outstanding thesis, 2008 Stony Brook
MSRI Postdoctoral fellowship, spring 2010,
CRM-Montreal postdoctoral fellowship, current.

RESEARCH INTERESTS

Symplectic and differential geometry, especially Gromov-Witten and Floer theory, mathematical physics, dynamical systems, and various interactions of these subjects.

SELECTED INVITED TALKS

Leipzig, Workshop in Symplectic Field Theory, 2005.

CRM, Montreal, 2007.

Courant Institute of Mathematics, NYC, 2007.

Tel Aviv University, Topology and dynamics seminar, 2009.

UW Madison, geometry-topology seminar, 2009.

UMASS, Amherst, geometry-topology seminar, (2 talks), 2008.

UMASS, Amherst, geometry-topology seminar, 2009.

Columbia University, geometry-topology seminar, 2009.

MSRI, research seminar, 2010.

ICMS, conference on "Symplectic Geometry and Transformation Groups", in honor of H. Hofer, 2010.

Georgia topology conference, 2011

Lodz, Poland conference: "Contact and symplectic topology, with a focus on open problems" (Part of the joint Israeli-Polish mathematical societies meeting.), 2011

CRM-Montreal, symplectic geometry seminar, 2011

UQAM, Montreal, CIRGET Seminar, 2012

TEACHING EXPERIENCE

Around 6 years of lecturing experience as a graduate student and as a visiting assistant professor at University of Massachusetts, Amherst.

REFERENCE LETTERS

Dusa McDuff, Columbia University/Barnard College
Octav Cornea, CRM Montreal
Michael Usher, University of Georgia

Kevin Costello, Northwestern

Paul Seidel, MIT

Paul Gunnels (teaching), University of Massachusetts, Amherst