

Yakov (Yasha) Savelyev

Research Fellow
Nicols Cabrera, n 13-15
Campus de Cantoblanco, UAM
28049 Madrid SPAIN
yasha.savelyev@gmail.com
website: <http://yasha.savelyev.googlepages.com/home>
phone: (413) 570-0163

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, August 2011- August 2013
Postdoctoral Fellow, ICMAT, Madrid, 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

Proof of the index conjecture in Hofer geometry, *Math. Res. Letters*, Volume 20 (2013), 981–984

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

Morse theory for the Hofer length functional, *arxiv preprint 2013*

Global Fukaya category and the space of A_∞ categories I, *arxiv preprint 2013*

Yang Mills theory and jumping curves, *arxiv preprint 2013*

Global Fukaya category and the space of A_∞ categories II, *arxiv preprint, 2014*

Non degenerate volume preserving diffeomorphisms of S^2 and the injectivity radius conjecture, *arxiv preprint, 2014*

On the injectivity radius in Hofer geometry, with Francois Lalonde, arxiv preprint, 2014

Not ready for publication but the second one should appear soon:

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

On configuration spaces of stable maps, arxiv preprint, 2011

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, 2011-2013

ICMAT Madrid 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. 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.

CRM-Montreal, symplectic geometry seminar, 2011

UQAM, Montreal, CIRGET Seminar, 2012

IBS, Pohang, Korea, 2013

ICMAT, Madrid 2013 (a series of lectures)

University of Toronto, topology seminar, 2013

QGM, Aarhus, Denmark, 2013

Kyoto University, Institute of Mathematical sciences, 2014

Jerusalem University, Israel, 2014

University of Montpellier, France, 2014

Conference talks

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

Tokyo IMPU, Floer and Novikov homology, Contact topology and related topics, 2014

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
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