## Yakov (Yasha) Savelyev

Profesor e investigador Titular A CUICBAS
University of Colima, Mexico
Bernal Díaz del Castillo 340
Col. Villas San Sebastian
28045 Colima Colima
Mexico

yasha.savelyev@gmail.com

website:http://yasha.savelyev.googlepages.com/home

**phone**: (312) 194-0671

## Publications and Preprints

The list together with links is also at: Publication list

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

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

Bott periodicity and stable quantum classes, Selecta Math., (2013) 19: 439-460

Gromov K-area and jumping curves in  $\mathbb{CP}^n$ , Algebraic and Geometric Topology, (2012), 2317–2327

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

Morse theory for the Hofer length functional, Journal of topology and analysis, 08, (2013); 06(02),

On the injectivity radius in Hofer geometry, with Francois Lalonde, Electronic Research announcements, Vol 21, 177-185, (2014)

Yang Mills theory and jumping curves, Intern. Journ. of Math., (2015); 26, 13 pgs,

On the Hofer geometry injectivity radius conjecture, International Mathematics Research Notices (2016); 7253-7267, doi: 10.1093/imrn/rnw023

Floer theory and topology of  $Diff(S^2)$ , Journal of symplectic geometry, vol 3, 7253-7267, (2017)

Extended Fuller index, sky catastrophes and the Seifert conjecture, Inter. J. Math., (2018), pg 1-22, https://doi.org/10.1142/S0129167X18500969

Mean curvature versus diameter and energy quantization, Annales mathematiques du Quebec, 1-7, (2019), 10.1007/s40316-019-00127-0

K-theoretic invariants of Hamiltonian fibrations, (with Egor Shelukhin), Journal of Symplectic Geometry, Vol. 18, No. 1 (2020), pp. 251-289.

Pseudoholomorphic curves on the lcs-fication of contact manifolds, (With Yong-Geun Oh), 55 pages, Advances in Geometry, (Accepted), 2022

Global Fukaya category I, 57 pages, IMRN (Accepted), 2022

## Submitted

Global Fukaya category II: singular connections, quantum obstruction theory, and other applications, 44 pages

A conformal symplectic Weinstein conjecture, 29 pages

Locally conformally symplectic deformation of Gromov non-squeezing, 9 pages

Incompleteness for stably computable formal systems, 23 pages

Smooth simplicial sets and universal Chern-Weil homomorphism, 40 pages

## Manuscripts (available on arxiv)

Simultaneous Go via quantum collapse Spectral geometry of the group of Hamiltonian symplectomorphisms On the topology of the space of stable curves