

Aleksandar Milivojevic

CONTACT INFORMATION	Mathematics Department Stony Brook University 100 Nicolls Road Stony Brook, 11794, New York	Phone: +1 631 994 9870 E-mail: milivojevic@math.stonybrook.edu Office: 3-104
RESEARCH INTERESTS	Rational homotopy theory and its application to the study of almost complex structures on manifolds; almost complex geometry	
EDUCATION	Stony Brook University , Stony Brook, NY Ph.D. student, Mathematics, August 2015 – May 2021 (expected) - Advisor: Dennis Sullivan University of Zagreb , Zagreb, Croatia M.S., Theoretical Mathematics, 2013–2015, <i>Summa Cum Laude</i> - Advisor: Goran Muic B.S., Mathematics, 2010–2013	
PUBLICATIONS	<ul style="list-style-type: none">– On the minimal sum of Betti numbers of an almost complex manifold, with M. Albanese, <i>Differential Geometry and its Applications</i>, 2019; link– Connected sums of almost complex manifolds, products of rational homology spheres, and the twisted spin^c Dirac operator, with M. Albanese, <i>Topology and its Applications</i>, 2019; link– Verifying the Hilali conjecture up to formal dimension twenty, with S. Cattalani, <i>Journal of Homotopy and Related Structures</i>, 2020; link– Another proof of the persistence of Serre symmetry in the Frölicher spectral sequence, <i>Complex Manifolds</i>, short note, 2020; link	
ACCEPTED FOR PUBLICATION	<ul style="list-style-type: none">– On the realization of symplectic algebras and rational homotopy types by closed symplectic manifolds, arxiv preprint: 2011.02928, 2020; accepted for publication in <i>Proceedings of the American Mathematical Society</i>	
PREPRINTS	<ul style="list-style-type: none">– Spin^h and further generalisations of spin, with M. Albanese, arxiv preprint: 2008.04934, 2020; submitted– On the topology of the space of almost complex structures on the six sphere, with B. Ferlengez and G. Granja, 2020; submitted	
AWARDS AND STIPENDS	<ul style="list-style-type: none">- The John W. Milnor Endowed Graduate Fund in Math, Stony Brook, 2018- Mathematics departmental award for M.S. students, University of Zagreb, 2015- Mathematics departmental award for B.S. students, University of Zagreb, 2013- Academic Stipend from the City of Dubrovnik, Croatia, 2013–2015- Academic Stipend from the Croatian Ministry of Education, 2012–2013- Stipend from the Croatian National Center for External Evaluation of Education, 2011–2012	
INVITED TALKS	Einstein Chair Seminar, City University of New York Graduate Center, January 2021 Oberwolfach mini-workshop Almost Complex Geometry, October 2020 City University of New York Graduate Center almost complex geometry seminar, September 2019, June 2018, May 2018	

Bronx Community College, December 2019

Ludwig–Maximilians–Universität München Oberseminar Geometrie, October 2019, December 2020

University of Zagreb topology seminar, March 2019 and July 2018

City University of New York Graduate Center Topology, Geometry, and Physics Seminar, November 2018

Dennis Sullivan’s Stony Brook seminar, October 2017

Workshop on J-holomorphic curves and Gromov–Witten invariants at the National Institute of Science Education and Research (NISER) Bhubaneswar, India, July 2017

Dennis Sullivan’s City University of New York Graduate Center seminar, May 2017

WORKSHOPS AND
CONFERENCES

Oberwolfach mini-workshop Almost Complex Geometry, October 2020

European Talbot workshop on free loop spaces, Fischbach bei Dahn, Germany, July–August 2018

James Simons’ 80th birthday conference – Fluids in $\dim \leq 3$ and complex manifolds in $\dim \geq 3$, CUNY Graduate Center, April 2018

Workshop on J-holomorphic curves and Gromov–Witten invariants at the National Institute of Science Education and Research (NISER) Bhubaneswar, India, July 2017

Algebraic Geometry Northeastern Series, November 2016, University of Massachusetts Amherst

Graduate Student Conference in Algebra, Geometry, and Topology, May 2016, Temple University

Algebraic Geometry Northeastern Series, April 2016, Yale University

TEACHING
EXPERIENCE

Teaching Assistant, Stony Brook University

- *Calculus*, Fall 2015, Fall 2016, Spring 2017, Spring 2018,
Fall 2018, Fall 2019, Spring 2020

- *Introduction to Analysis*, Fall 2017, Spring 2019

- *Differential Equations with Linear Algebra*, Spring 2016

- *Differential Equations: Dynamics and Change*, grader Spring 2016

- *Advanced Algebraic Topology*, grader Fall 2020

- *Geometry for Teachers*, grader Fall 2020

Junior Teaching Assistant, University of Zagreb

- *Linear Algebra, Probability, Set Theory, Metric Spaces*

OUTREACH,
SERVICE, AND
OTHER
EXPERIENCE

Mentored the sophomore Spencer Cattalani as part of the Directed Reading Program at Stony Brook University. This led to the publication “Verifying the Hilali conjecture up to formal dimension twenty”, *Journal of Homotopy and Related Structures*, 2020; [link](#)

Referee for *Mathematische Nachrichten*

Quick opinion for *Differential Geometry and its Applications*

Reviewer for zBMATH

American Mathematical Society Graduate Student Chapter at Stony Brook, *President*, 2017–2019

David Kahn’s *Saturday Applied Math program* for high-school students, Spring 2018

Math in Jeans at Stony Brook, Spring 2018

G-Research New York algorithmic trading game case study (team participant)