

# Curriculum Vitae

Ljudmila Kamenova

## Business Address:

Stony Brook University  
Department of Mathematics, Room 3-115  
Stony Brook, NY 11794-3651, USA  
(631) 632-8262  
kamenova@math.stonybrook.edu

## Degrees

B.S. and M.S., Sofia University, Spring 2001  
Ph.D., Massachusetts Institute of Technology, Spring 2006

## Positions

Postdoctoral Member, I.A.S. Princeton, September 2006 - August 2007  
J. H. Simons Instructor, SUNY Stony Brook, September 2007 - August 2011  
Simons Lecturer, SUNY Stony Brook, September 2011 - August 2016  
Research Assistant Professor, Stony Brook University, September 2016 - August 2019  
Research Associate Professor, Stony Brook University, August 2019 - present  
Visiting Professor, SCGP, August 2020 - August 2022

## Honors

Gold Medal in the 13<sup>th</sup> Balkan Mathematical Olympiad, 1996  
Silver Medal in the 37<sup>th</sup> International Mathematical Olympiad, 1996  
National Diploma for excellence in the fields of natural and mathematical sciences, 1996  
Over 20 first prizes in national and regional mathematical competitions from 1990 to 1996  
Second Prize in the National Mathematical Olympiad for University Students, 1997  
First Prize in the 5<sup>th</sup> International Mathematics Competition for University Students, 1998  
Norman Levinson award for MIT graduate student, September 2001 – May 2002  
Mentor recognition award for the Siemens-Westinghouse Competition, 2003  
Research Assistant Fellowships with Prof. Gang Tian, MIT 2003, 2005, 2006

## Grants

NSF Grant DMS-0805594, “Classification of Abelian fibered hyper-Kähler fourfolds”, 2008-2011.  
AMS travel award for the 2017 Mathematical Congress of the Americas in Montreal, Canada.  
Simons Foundation Collaboration Grant 522730, “Hyperkähler manifolds and Lagrangian fibrations”, 2017-2024.  
Award SFI-MPS-TSM-00013537 from the Simons Foundation International (2025-2030).

### Public Outreach and Training Activities

- Organizer of “Women in Math” meetings at Stony Brook University since 2009.
- Organizer of the Math Club on advanced problem solving for high school students on Long Island in Fall 2016.
- Lecturer at SigmaCamp 2017, an overnight Science and Math camp for children of ages 12 to 16.
- Mentor in the National Alliance for Doctoral Studies in the Mathematical Sciences since 2017.
- Leader of a networking session at the 2018 Girl Power in STEM held at the SCGP, Stony Brook, NY.
- Graduate Student Section interview for the Notices of the AMS, Vol. 65, No. 4 (2018) 416-417.
- Co-leader of a group at Women in Mathematical Physics, September 2020, BIRS, Banff, Canada.
- Co-leader of a group at Women in Mathematical Physics II, August 2023, BIRS, Banff, Canada.
- Mentored high school student Grant Yu (in 2019 and 2020).
- Initial Faculty Mentor for the SBU graduate student Spencer Cattalani (2021-22).
- Faculty Mentor for the SBU graduate student Alessandro Pilastro (2023-2024).
- Ph.D. Advisor for the SBU graduate student Alessandro Pilastro (2024- present).
- Plenary speaker at the 8th edition of ENYGMMa, CUNY Graduate Center (May 2024).

### Publications

1. Kamenova, L. K., *Complex structures on ruled surfaces*, Proc. of 30<sup>th</sup> Spring Conf. of UBM, Borovets, April 8–11, 2001, p. 163–168 (2001).
2. Kamenova, L., *Hyper-Kähler Fibrations and Hilbert Schemes*, Ph.D. Thesis (2006).
3. Kamenova, L., *Hyper-Kähler fourfolds fibered by elliptic products*, Epijournal de Géométrie Algébrique, Vol. 2 (2018), Article Nr. 7.
4. Kamenova, L., Verbitsky, M., *Families of Lagrangian fibrations on hyperkähler manifolds*, Adv. Math. 260 (2014) 401 - 413.
5. Kamenova, L., Lu, S., Verbitsky, M., *Kobayashi pseudometric on hyperkähler manifolds*, J. Lond. Math. Soc. 90 (2): (2014) 436 - 450.
6. R. Donagi, M. R. Douglas, L. Kamenova, M. Roček (editors), *String-Math 2013*, Proceedings of Symposia in Pure Mathematics, Vol. 88, AMS (2014).
7. Kamenova, L., *Finiteness of Lagrangian fibrations with fixed invariants*, C. R. Acad. Sci. Paris 354, Ser. I, No. 7 (2016) 707 - 711.
8. Bogomolov, F., Kamenova, L., Lu, S., Verbitsky, M., *The Kobayashi pseudometric and complex automorphisms*, “Geometry over nonclosed fields - Simons Symposium 2015”, Springer-Verlag (2017) 1 - 17.
9. Kamenova, L., Verbitsky, M., *Algebraic non-hyperbolicity of hyperkähler manifolds with Picard rank greater than one*, NYJM 23 (2017) 489 - 495.
10. Kamenova, L., *Survey of finiteness results for hyperkähler manifolds*, Proceedings of miniPAGES, Banach Center Publ. 116 (2018) 77 - 86.
11. Kamenova, L., Verbitsky, M., *Pullbacks of hyperplane sections for Lagrangian fibrations are primitive*, Commun. Contemp. Math., 21 (2019) No. 8, 1850065, 7 pp.

12. Bogomolov, F., Kamenova, L., Verbitsky, M., *Algebraically hyperbolic manifolds have finite automorphism groups*, Commun. Contemp. Math., 22 (2020) No. 2, 1950003, 10 pp.
13. Kamenova, L., *Twistor spaces and compact manifolds admitting both Kähler and non-Kähler structures*, JGSP 46 (2017) 25 - 35.
14. Javanpeykar, A., Kamenova, L., *Demailly's notion of algebraic hyperbolicity: geometricity, boundedness, moduli of maps*, Math. Zeit. 296 (2020) 1645 - 1672.
15. Kamenova, L., Mongardi, G., Oblomkov, A., *Symplectic involutions of  $K3[n]$ -type and Kummer  $n$ -type manifolds*, Bull. London Math. Soc. 54 (2022) 894 - 909.
16. Kamenova, L., Verbitsky, M., *Holomorphic Lagrangian subvarieties in holomorphic symplectic manifolds with Lagrangian fibrations and special Kahler geometry*, European Journal of Mathematics 8 (2022) 514 - 522.
17. van Bommel, R., Javanpeykar, A., Kamenova, L., *Boundedness in families with applications to arithmetic hyperbolicity*, J. London Math. Soc. II. Ser. 109 (2024) Article ID e12847, 51p.
18. Kamenova, L., Vafa, C., *Kobayashi non-hyperbolicity of Calabi-Yau manifolds via mirror symmetry*, Commun. Math. Phys. 378(1) (2020) 329 - 334.
19. Kamenova, L., Verbitsky, M., *Roundness of the ample cone and existence of double Lagrangian fibrations on hyperkähler manifolds*, accepted, to appear in the Kyoto J. Math, 2025, arXiv:2109.08088 [math.AG].
20. Kamenova, L., Lehn, C., *Non-hyperbolicity of holomorphic symplectic varieties*, accepted, to appear in EPIGA, 2025, arXiv:2212.11411 [math.AG].
21. Kamenova, L., *Finiteness of stable Lagrangian fibrations*, São Paulo J. Math. Sci. 18 (2024) 801-806, arXiv:2308.05844 [math.AG].
22. Kamenova, L., Mongardi, G., Oblomkov, A., *Fixed loci of symplectic automorphisms of  $K3[n]$  and  $n$ -Kummer type manifolds*, submitted, arXiv:2308.14692 [math.AG].
23. Kamenova, L., Mongardi, G., Oblomkov, A., *Erratum: Symplectic involutions of  $K3[n]$ -type and Kummer  $n$ -type manifolds*, Bull. London Math. Soc. 57, No. 7 (2025) 2235-2237.
24. Dutta, Y., Izadi, E., Kamenova, L., Marquand, L., *Some density results for hyperkähler manifolds*, accepted, to appear in Math. Res. Lett. (2025), arXiv:2403.04868 [math.AG].
25. Bogomolov, F., Kamenova, L., Verbitsky, M., *Sections of Lagrangian fibrations on holomorphic symplectic manifolds*, submitted, arXiv:2407.07877 [math.AG].
26. Kamenova, L., Verbitsky, M., *Torsor Neron models of hyperkahler manifolds*, submitted, arXiv:2509.12369 [math.AG].

#### Professional activities

Served on the selection committee for the 2025 Miami Wave Prizes.

Served on the selection committee for the 2024 AMC-IMSA Jose Adem Prize for Mathematical Research in Mexico.

Served as an evaluator for a postdoctoral fellowship application for the European Science Foundation in 2023.

Served as a referee of a PhD thesis at the University of Bologna in 2024.

Served on thesis committees at SBU in 2014 - 2025.

Served on the SCGP evaluating committee in 2020/21.

Served on an NSF panel in 2020.

Referee for the journals “Journal of the AMS”, “Proc. of the AMS”, “Algebraic Geometry”, “International Mathematics Research Notices”, “Mathematical Research Letters”, GAFA, “Indiana U. Math. Journal”, “J. Geom. Mech.”, “Proceedings of the Bulgarian Academy of Sciences”, “Experimental Mathematics”, “Forum of Mathematics: Sigma”, “European Journal of Mathematics”, “Research in the Mathematical Sciences”, “Journal of Algebraic Geometry”, “Bulletin de la Société Mathématique de France”, “Journal of Pure and Applied Algebra”, etc.

Reviewer for Zentralblatt MATH and for MathSciNet.

Editor for String-Math 2013 Conference Proceedings.

Contributed problems for the doctoral comprehensive exams at SBU from 2008 until present. In charge of the Putnam selection and preparation process at SBU in Fall 2014, 2015, 2016, 2017, 2018, and 2019.

Part of the doctoral comprehensive exam preparation at SBU in Fall 2015, 2016, and 2017.

Chaired the January 2016 doctoral comprehensive exam and participated in its grading and organizing. Grader for the 2014, 2016, 2018, 2020, 2022, and 2024 SBU comps.

Mentor in the National Alliance for Doctoral Studies in the Mathematical Sciences since 2017.

Member of the Undergraduate Committee of the Department of Mathematics at Stony Brook University in 2016/17 and 2017/18, where we helped revise the SBU’s undergraduate program and advanced track program.

Contributed to the QS University Rankings report on 2018.

Member of the Stony Brook University Colloquium and the Simons Lectures committee in 2018/19 and 2019/20.

Member of the Scientific Committee of the 5th Geometry-Topology Summer School, Istanbul Center for Mathematical Sciences, July 2020.

#### Conferences organized

AGNES, Stony Brook (October 2009)

<http://www.agneshome.org/fall09>

FRG Workshop on Holomorphic symplectic varieties, Courant Institute, NYC (June 2011)

<http://www.math.nyu.edu/~tschinke/.nyu/FRG11.html>

Hyper-Kähler Geometry Workshop, SCGP, Stony Brook (October 2012)

<http://scgp.stonybrook.edu/archives/3434>

String-Math 2013, SCGP, Stony Brook (June 2013)

<http://scgp.stonybrook.edu/events/event-pages/string-math-2013>

Quiver Varieties Program and Workshop, SCGP, Stony Brook (September - November, 2013)

<http://scgp.stonybrook.edu/archives/7134>

29th Annual Geometry Festival, Stony Brook University (April 11 - 13, 2014)

<http://www.math.stonybrook.edu/geomfest14/>

Workshop on derived categories and Chow groups of hyperkähler and Calabi-Yau varieties, SCGP, Stony Brook (September 2016)

<http://scgp.stonybrook.edu/archives/18379/>

Geometry and Mathematical Physics Workshop dedicated to the memory of Vasil Tsanov, UACEG, Sofia, Bulgaria (July 2019)

[http://www.math.stonybrook.edu/~kamenova/tsanov\\_memorial\\_workshop/tsanov\\_memorial\\_w](http://www.math.stonybrook.edu/~kamenova/tsanov_memorial_workshop/tsanov_memorial_w)

Women in Mathematical Physics, BIRS, Banff, Canada (September 2020)

<https://sites.google.com/site/womathphys/home/>

Program: Hyperkahler quotients, singularities, and quivers, SCGP, Stony Brook (January - February, 2023)

<https://scgp.stonybrook.edu/archives/35449/>

Workshop: Hyperkahler quotients, singularities, and quivers, SCGP, Stony Brook (January - February, 2023)

<https://scgp.stonybrook.edu/archives/35509/>

Women in Mathematical Physics II, BIRS, Banff, Canada (August 2023)

<https://www.birs.ca/events/2023/5-day-workshops/23w5073>

### Talks

“The mirror conjecture and special Lagrangian fibrations”

Differential Geometry Graduate Student Seminar

Massachusetts Institute of Technology, 2001

“Desingularized moduli spaces of sheaves on a K3 surface”

Differential Geometry Graduate Student Seminar

Massachusetts Institute of Technology, 2002

“Counting rational curves on K3 surfaces”

Algebraic Geometry Graduate Student Seminar

Massachusetts Institute of Technology, 2002

“Finiteness results for hyperKähler manifolds”

Differential Geometry Graduate Student Seminar

Massachusetts Institute of Technology, 2002

“Vector bundles on K3 surfaces”

Pure Math Graduate Seminar

Massachusetts Institute of Technology, 2003

“Elliptic fibrations”

Pure Math Graduate Seminar

Massachusetts Institute of Technology, 2004

“On hyper-Kähler manifolds”

IAS Members seminar

IAS, Princeton, 2006

“A special class of hyper-Kähler manifolds”

Geometry/Topology seminar

SUNY Stony Brook, 2007

“Hyper-Kähler Fibrations”

University of Hong Kong, 2009 and Hong Kong University of Science and Technology,

2009

“On hyper-Kähler Fibrations”

Geometry Seminar

Sofia University, 2009

“Hyper-Kähler Fibrations”

Algebraic Geometry Seminar

UC San Diego, 2009

- “Abelian Fibrations on Hyper-Kähler Varieties”  
Geometry/Topology seminar  
SUNY Stony Brook, 2010
- “Finiteness for hyper-Kähler Abelian fibrations”  
Geometry and Mathematical Physics seminar  
Sofia University, 2010
- “Finiteness for hyper-Kähler manifolds”  
Geometry/Topology seminar  
SUNY Stony Brook, 2011
- “Four-dimensional hyper-Kähler Abelian fibrations”  
FRG Workshop on holomorphic symplectic varieties  
Courant Institute, 2011
- “Recent developments in hyper-Kähler geometry”  
Geometric Structures in Mathematical Physics  
Golden Sands, Bulgaria, 2011
- “Introduction to hyper-Kähler geometry”  
Learning seminar on the Hitchin system  
Stony Brook University, 2011
- “Hyper-Kähler manifolds and Abelian fibrations”  
Weekly Seminar of Laboratory of Algebraic Geometry and its Applications  
HSE, Moscow 2012
- “Largangian fibrations on hyperkähler manifolds and non-hyperbolicity”  
Valley Geometry Seminar  
University of Massachusetts, Amherst, 2013
- “Hyperkähler fibrations and Kobayashi non-hyperbolicity”  
Geometry Meeting  
Sofia Technical University, 2013
- “Kobayashi’s conjecture for hyperkähler manifolds”  
Colloquium  
Rutgers-Newark, 2013
- “Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
Geometry/Topology seminar  
SUNY Stony Brook, 2013
- “Kobayashi’s conjecture for K3 surfaces and for hyperkähler manifolds”  
Geometry and Topology Seminar  
University of Waterloo, Canada, 2014
- “Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
Lille, France, 2014
- “Kobayashi non-hyperbolicity and hyperkähler manifolds”  
University of Bonn  
Bonn, Germany, 2014
- “Kobayashi pseudometric and non-hyperbolicity of hyperkähler manifolds”  
Seminar ”Komplexe Geometrie”  
RUHR-Universität Bochum, Germany, 2014
- “Hyperkähler manifolds and Kobayashi’s conjecture”  
Institut de Mathématiques de Jussieu  
Paris, France, 2014

- “Kobayashi’s conjecture for K3 surfaces and for hyperkähler manifolds”  
International Conference ”Mathematics Days in Sofia”  
Sofia, Bulgaria, 2014
- “On Matsushita’s conjecture”  
Complex manifolds, dynamics and birational geometry  
HSE, Moscow, 2014
- “On the Kobayashi conjecture for hyperkähler manifolds”  
Hyperbolicity in algebraic geometry  
Ilhabela, Sao Paulo, Brazil, 2015
- “On Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
Workshop on Hyperkähler Geometry  
KIAS, Seoul, South Korea, 2015
- “Kobayashi’s pseudometric on hyperkähler manifolds and Kobayashi’s conjecture”  
Distribution of Rational and Holomorphic Curves in Algebraic Varieties  
BIRS, Banff, Canada, 2015
- “Vanishing of the Kobayashi Pseudometric on K3 Surfaces and Hyperkähler Manifolds”  
Simons Symposium “Geometry Over Non-closed Fields”  
Rio Grande, Puerto Rico, 2015
- “On a conjecture of Matsushita”  
Hyperkähler Saturday  
HSE, Moscow, 2015
- “On Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
II ELGA, June 2015  
Cabo Frio, RJ, Brazil
- “On Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
Newton Institute, August 2015  
Cambridge, UK
- “On Kobayashi’s pseudometric of compact complex manifolds”  
Université libre de Bruxelles, December 2015  
Brussels, Belgium
- “On Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
UCLA colloquium, January 2016  
Los Angeles, CA
- “Complex automorphisms and the Kobayashi pseudometric on compact complex manifolds”  
Geometry/Topology Seminar, March 2016  
Stony Brook University, Stony Brook, NY
- “Finiteness results for deformation types of hyperkähler manifolds”  
Conference: Varieties with trivial canonical bundles, June 2016  
Będlewo, Poland
- “On Kobayashi’s conjecture for K3 surfaces and hyperkaehler manifolds”  
CCNY colloquium, November 2016  
New York, NY
- “Finiteness results for deformation types of hyperkähler manifolds”  
CIRGET seminar, January 2017  
UQAM, Montréal, Canada
- “Hyperbolicity in hyperkähler geometry”  
ESI Program: Advances in Birational Geometry, May 2017  
Vienna, Austria

- “Hyperbolicity in hyperkähler geometry”  
USTC seminar, June 2017  
Hefei, China
- “Problem solving for undergraduate students”  
USTC public lecture, June 2017  
Hefei, China
- “Hyperbolicity in hyperkähler geometry”  
Mathematical Congress of the Americas, July 2017  
Montréal, Canada
- “Mathematics of Card Games”  
SigmaCamp, August 2017  
Silver Lake Conference Center, Sharon, CT
- “Non-hyperbolicity of hyperkähler manifolds”  
Komplexe Analysis, August 2017  
Oberwolfach, Germany
- “On dominability of hyperkähler manifolds”  
CIRGET seminar, September 2017  
UQAM, Montréal, Canada
- “On Kobayashi’s conjectures and algebraic non-hyperbolicity of hyperkähler manifolds”  
AGNES, October 2017  
Boston, MA
- “Non-hyperbolicity of hyperkähler manifolds and Kobayashi’s conjectures”  
International Workshop on Differential Geometry, January 2018  
University of Sydney, Australia
- “Hyperkähler geometry”  
First and Second Year Student Seminar, April 2018  
Stony Brook University, Stony Brook, NY
- “On dominability of hyperkähler manifolds”  
Courant Algebraic Geometry seminar, April 2018  
Courant, NYU, NY
- “On Kobayashi’s conjectures and Kobayashi quotients”  
Princeton Differential Geometry and Geometric Analysis Seminar, May 2018  
Princeton University, Princeton NJ
- “Algebraic non-hyperbolicity of hyperkähler manifolds”  
Joint International AMS-CMS Meeting, June 2018  
Fudan University, Shanghai, China
- “On Kobayashi’s conjecture for K3 surfaces and hyperkähler manifolds”  
National Mathematics Colloquium, June 2018  
Bulgarian Academy of Sciences, Sofia, Bulgaria
- “Finiteness results for hyperkähler manifolds”  
UGA Algebraic Geometry Seminar, October 2018  
University of Georgia, Athens, GA
- “Putnam related problems and tips”  
SBU Math Club, October 2018  
Stony Brook University, Stony Brook, NY
- “Finiteness results for hyperkähler manifolds”  
Geometry and Physics of Hitchin Systems Program, June 2019  
SCGP, Stony Brook, NY

- “On dominability of hyperkähler manifolds”  
 IMPA Differential Geometry Seminar, January 2020  
 IMPA, Rio de Janeiro, Brazil
- “Algebraic non-hyperbolicity of hyperkähler manifolds”  
 UCSD Algebraic Geometry Seminar, February 2021  
 UCSD, San Diego, CA (online)
- “Algebraic non-hyperbolicity of hyperkähler manifolds”  
 Seminar of Algebra and Logic, March 2021  
 Department of Algebra and Logic, IMI/BAS, Sofia, Bulgaria (online)
- “Non-hyperbolicity of hyperkähler manifolds and Kobayashi’s conjectures”  
 SCGP Weekly Meeting in Math, April 2021  
 SCGP, Stony Brook, NY
- “Hyperbolic geometry”  
 Panorama of Geometry and Topology, April 2021  
 undergraduate event hosted by University of Iowa, IA
- “Non-hyperbolicity of hyperkähler manifolds and Kobayashi’s conjectures”  
 Differential Geometry Seminar, April 2021  
 University of Iowa, IA
- “Non-hyperbolicity of primitive symplectic varieties and Kobayashi’s conjectures”  
 Geometric and Arithmetic Frontiers of Orbifolds: a focused introductory workshop,  
 May - June, 2022  
 UQAM, Montreal, Canada
- “Finiteness results for hyperkähler manifolds”  
 ICMS, Sofia, June 2022  
 ICMS, Bulgarian Academy of Sciences, Bulgaria
- “Kobayashi non-hyperbolicity of Calabi-Yau manifolds via mirror symmetry”  
 Western Hemisphere Virtual Symplectic Seminar, June 2023
- “Finiteness results for hyperkähler manifolds”  
 Workshop on birationality in complex and symplectic geometries, CIRGET/ UQAM,  
 Montreal, Canada, September 2023
- “Twistor spaces and compact manifolds admitting both Kähler and non-Kähler structures”  
 Conference: General Geometries and Gauge Theory, University of Miami, Coral Gables,  
 FL, December 2023
- “On dominability of hyperkähler manifolds”  
 Columbia Algebraic Geometry Seminar, NYC, NY, February 2024
- “Survey of non-hyperbolicity results for hyperkähler manifolds”  
 8th ENYGMMa, Graduate Center - CUNY, NYC, NY, May 2024
- “Entire curves on holomorphic symplectic varieties”  
 Moduli Spaces and Singularities, CRM, Montreal, Canada, May 2024
- “Entire curves on holomorphic symplectic varieties”  
 MPS Conference on Arithmetic Geometry, Group Actions and Rationality Problems,  
 Simons Foundation, NYC, NY, May 2024
- “Entire curves on holomorphic symplectic varieties”  
 Complex Geometry at Large, Sunny Beach, Bulgaria, August 2024
- “On dominability of hyperkähler manifolds”  
 Japanese-European Symposium on Symplectic Varieties and Moduli Spaces, RIMS,  
 Kyoto, Japan, September 2024

“Kobayashi and algebraic non-hyperbolicity of hyperkähler manifolds”

Monthly Lecture Series - On the Geometry of the Cotangent Bundle and Hyperbolicity,  
IMSA, University of Miami, Miami, FL, February 2025

“Kobayashi non-hyperbolicity of hyperkähler manifolds, vanishing of the Kobayashi pseudo-  
metric, and dominability”

Differential Geometry, Topology, and special structures seminar, Graduate Center of  
CUNY, NYC, NY, May 2025

“Primitivity of pullbacks of hyperplane sections for Lagrangian fibrations”

Mathematical Congress of the Americas 2025, IMSA, University of Miami, FL, July  
2025

“Sections of Lagrangian fibrations on holomorphic symplectic manifolds”

Complex Geometry at Large, Burgas, Bulgaria, August 2025

**Conferences attended**

30<sup>th</sup> Spring Conference of the Union of Bulgarian Mathematicians

Borovets, Bulgaria

April 2001

Introductory Workshop on Algebraic Stacks, Intersection Theory, and Non-Abelian Hodge  
Theory

MSRI, Berkeley, CA

January 2002

Learning Stacks and Computational Methods Through Problem-Solving

UIUC, Champaign-Urbana, IL

June 2002

Moduli, Lie Theory and Interactions with Physics

Rome, Italy

April 2003

Algebraic Geometry and Categories

Nice, France

June 2005

Mathematical Foundations of Homological Mirror Symmetry

IAS, Princeton

January 2007

Applications of Homological Mirror Symmetry

IAS, Princeton

March 2007

XX Escola de Algebra

Rio de Janeiro, Brazil

August 2008

24th Annual Geometry Festival

Stony Brook

April 2009

Clay Research Conference  
Harvard Science Center  
May 2009

Spaces of curves and their interaction with diophantine problems  
Columbia University  
June 2009

Co-organizer of Algebraic Geometry Northeastern Series Workshop  
Stony Brook University  
October 2009

AGNES Workshop  
UMass Amherst  
April 2010

Clay Math Conference 2010  
IHP, Paris  
June 2010

2010 Summer School: Arithmetic aspects of rational curves  
Institut Fourier, Grenoble  
June 2010

Complex Algebraic Geometry  
IHP, Paris  
June - July 2010

Simons Center for Geometry and Physics Inauguration Conference  
Stony Brook  
November 2010

Workshop on Extremal Kähler Metrics  
SCGP, Stony Brook  
March 2011

AGNES Workshop  
MIT  
April 2011

JDG Conference on Geometry and Topology  
Harvard  
April 2011

Moduli spaces and moduli stacks  
Columbia University  
May 2011

Geometric and Algebraic Structures in Mathematics  
Stony Brook University  
May-June 2011

Co-organizer of FRG Workshop on Holomorphic symplectic varieties  
Courant Institute  
June 2011

Summer School on Algebraic Geometry  
RIMS, Kyoto  
June 2011

MMP and extremal rays  
RIMS, Kyoto  
June 2011

A celebration of algebraic geometry  
Harvard  
August 2011

Geometric Structures in Mathematical Physics  
Golden Sands, Bulgaria  
September 2011

Moduli spaces and automorphic forms  
Luminy, France  
October 2011

AGNES Workshop  
Stony Brook University  
October 2011

AGNES Workshop  
University of Massachusetts, Amherst  
March 2012

String Theory for Mathematicians  
SCGP, Stony Brook  
May 2012

Algebra and Geometry  
HSE and Independent University of Moscow  
June 2012

2012 Summer Simons Workshop in Mathematics and Physics  
SCGP, Stony Brook  
August 2012

2012 Cycles Conference  
Stony Brook University  
October 2012

AGNES Fall 2012 Workshop  
Brown University, Providence, RI  
October 2012

Co-organizer of Hyper-Kahler Geometry Workshop  
SCGP, Stony Brook  
October - November 2012

Facets of Integrability  
SCGP, Stony Brook  
January 2013

A conference to describe the published scientific work of Jim Simons on the occasion of his  
75th birthday  
CUNY Graduate Center, NYC  
May 2013

Moduli Spaces and their Invariants in Mathematical Physics  
CRM, Montreal  
June 2013

Thematic Program on Rational Points, Rational Curves and Entire Holomorphic Curves on  
Algebraic Varieties  
CRM, Montreal  
June 2013

Co-organizer of String-Math 2013 Conference  
SCGP, Stony Brook  
June 2013

Geometry Meeting  
Sofia, Bulgaria  
July 2013

Foliation theory in algebraic geometry  
Simons Foundation, NYC  
September 2013

Euler Institute Program "Cohomology in Mathematics and Physics"  
St. Petersburg, Russia  
September 2013

Co-organizer of Quiver Varieties Fall 2013 Program  
SCGP, Stony Brook  
September - November 2013

Co-organizer of Quiver Varieties Workshop  
SCGP, Stony Brook  
October 2013

AGNES Workshop  
Boston College  
October 2013

Moduli spaces of irreducible symplectic varieties, cubics and Enriques surfaces  
Lille, France  
March 2014

29th Annual Geometry Festival  
Stony Brook University  
April 2014

AGNES Workshop  
Stony Brook University  
April 2014

A workshop on the Chow group of holomorphically symplectic manifolds  
HSE, Moscow  
May 2014

International Conference "Mathematics Days in Sofia"  
Sofia, Bulgaria  
July 2014

2014 Simons Summer Workshop in Math and Physics  
SCGP, Stony Brook  
July - August 2014

G2 Manifolds Program  
SCGP, Stony Brook  
August - October 2014

G2 Manifolds Workshop  
SCGP, Stony Brook  
September 2014

AGNES Workshop  
University of Pennsylvania, Philadelphia  
October 2014

Complex manifolds, dynamics and birational geometry  
HSE, Moscow  
November 2014

Wall Crossing, Quantum Integrable Systems, and TQFT  
SCGP, Stony Brook  
November 2014

Hyperbolicity in algebraic geometry  
Ilhabela, Sao Paulo, Brazil  
January 2015

Workshop on Hyperkähler Geometry  
KIAS, Seoul, South Korea  
March 2015

Distribution of Rational and Holomorphic Curves in Algebraic Varieties  
BIRS, Banff, Canada  
March 2015

Simons Symposium “Geometry Over Non-closed Fields”  
Rio Grande, Puerto Rico  
March 2015

Workshop on rationally connected varieties  
HSE, Moscow  
May 2015

II Latin American School of Algebraic Geometry and applications  
Cabo Frio, RJ, Brazil  
June 2015

Metric and Analytic Aspects of Moduli Spaces  
Newton Institute, Cambridge, UK  
July - August 2015

Collapsing Calabi-Yau manifolds  
SCGP, Stony Brook  
September 2015

Program on complex, p-adic, and logarithmic Hodge theory and their applications  
SCGP, Stony Brook  
March - April 2016

Varieties with trivial canonical bundles  
Beđlewo, Poland  
June 2016

Conference on Differential Geometry  
UQAM, Montreal  
July 2016

Simons Summer Workshop  
SCGP, Stony Brook  
July 2016

Geometry at the ANU  
Canberra, Australia  
August 2016

Arithmetic Algebraic Geometry  
Courant, NYU, New York  
August - September 2016

Co-organizer of Derived categories and Chow groups of hyperkähler and Calabi-Yau varieties  
SCGP, Stony Brook  
September 2016

Hyper-Kähler Manifolds, Hodge Theory and Chow Groups  
Sanya, China  
December 2016

Advances in Birational Geometry Program  
ESI, Vienna, Austria  
May 2017

Homological mirror symmetry and higher genus invariants  
SCGP, Stony Brook  
May 2017

Mathematical Congress of the Americas  
Montreal, Canada  
July 2017

Simons Summer Workshop  
SCGP, Stony Brook  
July-August 2017

Hodge Theory, Moduli and Representation Theory  
SCGP, Stony Brook  
August 2017

Conference on Birational Geometry  
Simons Foundation, NY  
August 2017

Komplexe Analysis  
Oberwolfach, Germany  
August 2017

AGNES Workshop  
Northeastern University, Boston, MA  
October 2017

Geometry of Manifolds  
SCGP, Stony Brook, NY  
October 2017

International Workshop on Differential Geometry  
University of Sydney, Australia  
January 2018

AGNES Workshop  
Rutgers University, New Brunswick, NJ  
April 2018

Mathematics is a long conversation: a celebration of Barry Mazur  
Harvard University, Cambridge, MA  
June, 2018

Joint International AMS-CMS Meeting  
Fudan University, Shanghai, China  
June, 2018

Program on the Geometry and Physics of Hitchin Systems  
SCGP, Stony Brook, NY  
January-June 2019

Holomorphic Differentials in Mathematics and Physics  
SCGP, Stony Brook, NY  
February 2019

Challenges at the Interface of Hitchin Systems and String Theory  
SCGP, Stony Brook, NY  
March 2019

Graduate Summer School on the Mathematics and Physics of Hitchin Systems  
SCGP, Stony Brook, NY  
May 2019

Co-organizer of Geometry and Mathematical Physics Workshop dedicated to the memory  
of Vasil Tsanov  
UACEG, Sofia, Bulgaria  
July 2019

Simons Summer Workshop  
SCGP, Stony Brook  
July-August 2019

AGNES Workshop  
Boston College, Boston, MA  
September 2019

Varieties with Trivial Canonical Class (virtual meeting)  
CIRM, Luminy, France  
April 2020

Komplexe Analysis - Algebraicity and Transcendence (virtual meeting)  
MFO, Oberwolfach, Germany  
August 2020

Women in Mathematical Physics (virtual meeting)  
BIRS, Banff, Canada  
September 2020

AMS Sectional Meetings  
meeting virtually, September and October 2020

Stability in mirror symmetry (virtual meeting)  
AIM, San Jose, CA  
December 2020

Panorama of Geometry and Topology (virtual meeting)  
University of Iowa  
April 2021

Simons Summer Workshop: Strings and Geometry  
SCGP, Stony Brook, NY  
July - August 2021

MPS Conference on Higher Dimensional Geometry  
Simons Foundation, New York, NY  
February 23 - 25, 2022

Deformation of Geometric Structures in Current Mathematics: A Celebration of the Works  
of Masatake Kuranishi  
CMSA, Harvard University, Cambridge, MA  
May 9 - 12, 2022

Geometric and Arithmetic Frontiers of Orbifolds: a focused introductory workshop  
UQAM, Montreal, Canada  
May 30 - June 3, 2022

2022 Simons Summer Workshop  
SCGP, Stony Brook, NY  
July - August 2022

Higher Dimensional Geometry  
SCGP, Stony Brook, NY  
August 22 - 26, 2022

Birational Complexity of Algebraic Varieties  
SCGP, Stony Brook, NY  
December 12 - 16, 2022

Program: Hyperkahler quotients, singularities, and quivers  
SCGP, Stony Brook, NY  
January 2 - February 23, 2023

Workshop: Hyperkahler quotients, singularities, and quivers  
SCGP, Stony Brook, NY  
January 30 - February 3, 2023

Komplexe Analysis - Differential and Algebraic methods in Kähler spaces  
MFO, Oberwolfach, Germany  
April 9 - 14, 2023

Supergravity, Generalized Geometry and Ricci Flow  
SCGP, Stony Brook, NY  
April 17 - 21, 2023

Homological Mirror Symmetry  
SCGP, Stony Brook, NY  
April 25 - 28

2023 Simons Physics Summer Workshop: Celebrating 20 Years  
SCGP, Stony Brook, NY  
July 2023

2023 Simons Math Summer Workshop  
SCGP, Stony Brook, NY  
August 2023

Women in Mathematical Physics II  
BIRS, Banff, Canada  
August 13 - 18, 2023

Birationality in complex and symplectic geometries  
CIRGET/ UQAM, Montreal, Canada  
September 25 - 29, 2023

Complex Lagrangians, Mirror Symmetry, and Quantization  
BIRS, Banff, Canada  
October 15 - 20, 2023

Conference: General Geometries and Gauge Theory  
University of Miami, Coral Gables, FL  
December 11 - 16, 2023

Singularity theory and hyperbolicity  
Newtwn Institute, Cambridge, UK  
March 18 - 22, 2024

8th ENYGMMa  
Graduate Center - CUNY, NYC, NY  
May 3, 2024

Moduli Spaces and Singularities  
CRM, Montreal, Canada  
May 20 - 24, 2024

MPS Conference on Arithmetic Geometry, Group Actions and Rationality Problems  
Simons Foundation, NYC, NY  
May 29 - 31, 2024

IMSAC Days in Sofia  
Bulgarian Academy of Sciences, Sofia, Bulgaria  
August 8 - 10, 2024

Complex Geometry at Large  
Sunny Beach, Bulgaria  
August 12 - 16, 2024

Japanese-European Symposium on Symplectic Varieties and Moduli Spaces  
RIMS, Kyoto, Japan  
September 17 - 20, 2024

Mathematical Congress of the Americas 2025  
IMSA, University of Miami, FL  
July 21 - 25, 2025

Complex Geometry at Large  
Burgas, Bulgaria  
August 11 - 14, 2025

**Teaching experience**

Recitation Instructor, “Linear Algebra and Analytic Geometry”, “Advanced Algebra”, and “Methods of Analysis”  
Sofia University, 1999, 2000, 2001

Mentor, Research Science Institute,  
Massachusetts Institute of Technology, Summer 2002

Recitation Instructor and Course Administrator, “Multivariable calculus” Math 18.02  
Massachusetts Institute of Technology, Spring 2004

Lecturer, “Linear Algebra” MAT 211  
SUNY Stony Brook, Fall 2007

Lecturer, “Functions” MAT 130  
SUNY Stony Brook, Spring 2008

Lecturer, “Mathematical Problems and Games” MAT 160  
SUNY Stony Brook, Spring 2008

Lecturer, “Calculus B” MAT 126  
SUNY Stony Brook, Fall 2008

Lecturer, “Algebra I” MAT 534  
SUNY Stony Brook, Fall 2008

Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2009

Lecturer, “Algebra III: Algebraic Geometry” MAT 536  
SUNY Stony Brook, Fall 2009

Lecturer, “Introduction to Calculus” MAT 123  
SUNY Stony Brook, Spring 2010

Lecturer, “Differential Geometry of Surfaces” MAT 362  
SUNY Stony Brook, Spring 2010

Lecturer, “Topics in Complex Analysis: K3 surfaces and hyper-Kähler manifolds” MAT 626  
SUNY Stony Brook, Fall 2010

Lecturer, “Introduction to Calculus” MAT 123  
SUNY Stony Brook, Spring 2011

Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2011

Lecturer, “Algebra I” MAT 534  
SUNY Stony Brook, Fall 2011

Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2012

Lecturer, “Geometric Structures” MAT 360  
SUNY Stony Brook, Spring 2012

Lecturer, “Complex Geometry” MAT 545  
SUNY Stony Brook, Fall 2012

Lecturer, “Number Theory” MAT 311  
SUNY Stony Brook, Spring 2013

- Lecturer, “Differential Geometry of Surfaces” MAT 362  
SUNY Stony Brook, Spring 2013
- Lecturer, “Complex Analysis II: Riemann Surfaces” MAT 543  
SUNY Stony Brook, Fall 2013
- Lecturer, “Number Theory” MAT 311  
SUNY Stony Brook, Spring 2014
- Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2014
- Lecturer, “Problem Solving” MAT 260  
SUNY Stony Brook, Fall 2014
- Course coordinator and Lecturer, “Introduction to Calculus” MAT 123  
SUNY Stony Brook, Fall 2014
- Lecturer, “Introduction to Lie groups and Lie algebras” MAT 552  
SUNY Stony Brook, Spring 2015
- Lecturer, “Problem Solving” MAT 260  
SUNY Stony Brook, Fall 2015
- Lecturer, “Problem Seminar” MAT 590  
SUNY Stony Brook, Fall 2015
- Lecturer, “Advanced Topics in Complex Analysis: K3 surfaces, hyperkähler manifolds and moduli spaces” MAT 670  
SUNY Stony Brook, Spring 2016
- Lecturer, “Problem Solving” MAT 260  
SUNY Stony Brook, Fall 2016
- Lecturer, “Problem Seminar” MAT 590  
SUNY Stony Brook, Fall 2016
- Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2017
- Lecturer, “Problem Seminar” MAT 590  
SUNY Stony Brook, Fall 2017
- Lecturer, “History of Mathematics” MAT 336  
SUNY Stony Brook, Spring 2018
- Lecturer, “Seminar in Mathematics: Vector Bundles on Manifolds” MAT 402  
SUNY Stony Brook, Spring 2018
- Lecturer, “Algebra III” MAT 544  
SUNY Stony Brook, Fall 2018
- Lecturer, “Topics in Algebraic Geometry: Elements of Hodge theory and hyperkähler geometry” MAT 614, SUNY Stony Brook, Fall 2019
- Lecturer, “Foundations of Analysis” MAT 319  
SUNY Stony Brook, Spring 2020
- Lecturer, “Complex Analysis I” MAT 536  
SUNY Stony Brook, Spring 2020
- Lecturer, “Applied Real Analysis” MAT 341  
SUNY Stony Brook, Fall 2021
- Lecturer, “Algebra II” MAT 535  
SUNY Stony Brook, Spring 2022

- Lecturer, “Foundations of Analysis” MAT 319  
SUNY Stony Brook, Spring 2022
- Lecturer, “Topics in Differential Geometry: K3 Surfaces and Hyperkähler Manifolds” MAT 644, SUNY Stony Brook, Fall 2022
- Lecturer, “Topology, Geometry II” MAT 531  
SUNY Stony Brook, Spring 2023
- Lecturer, “Linear Algebra” MAT 310  
SUNY Stony Brook, Fall 2023
- Lecturer, “Advanced Linear Algebra” MAT 315  
SUNY Stony Brook, Spring 2024
- Course coordinator and Lecturer, “Introduction to Calculus” MAT 123  
SUNY Stony Brook, Spring 2024
- Lecturer, “Topology, Geometry I” MAT 530  
SUNY Stony Brook, Fall 2024
- Lecturer, “Hyperkähler geometry, moduli spaces and ergodicity” MAT 645  
SUNY Stony Brook, Spring 2025
- Lecturer, “Advanced Linear Algebra” MAT 315  
SUNY Stony Brook, Spring 2025
- Lecturer, “History of Mathematics” MAT 336  
SUNY Stony Brook, Fall 2025
- Lecturer, “Seminar: Mathematical Cryptography” MAT 401  
SUNY Stony Brook, Fall 2025