

Curriculum Vitae

Ljudmila Kamenova

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Stony Brook University
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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 13th Balkan Mathematical Olympiad, 1996
Silver Medal in the 37th 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 5th 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.

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 30th Spring Conf. of UBM, Borovets, April 8–11, 2001, p. 163–168 (2001).
2. Kamenova, L., *Hyper-Kaehler 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 hyperkaehler manifolds*, Adv. Math. 260 (2014) 401 - 413.
5. Kamenova, L., Lu, S., Verbitsky, M., *Kobayashi pseudometric on hyperkahler 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*, to appear in the Kyoto J. Math, 2024, arXiv:2109.08088 [math.AG].
20. Kamenova, L., Lehn, C., *Non-hyperbolicity of holomorphic symplectic varieties*, 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*, 2023.
24. Dutta, Y., Izadi, E., Kamenova, L., Marquand, L., *Some density results for hyperkähler manifolds*, submitted, arXiv:2403.04868 [math.AG].
25. Bogomolov, F., Kamenova, L., Verbitsky, M., *Sections of Lagrangian fibrations on holomorphic symplectic manifolds*, arXiv:2407.07877 [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, and SBU.

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/fall109>

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

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 ENYGMa, 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

Conferences attended

- 30th 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
Będlewo, 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

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