

Laurentiu Maxim

Curriculum Vitae

Education

- 2000–2005 **Ph.D. in Mathematics**, *University of Pennsylvania*, Philadelphia, USA.
1997–1999 **Master in Mathematics**, *University of Bucharest*, Bucharest, Romania.
1993–1997 **B.Sc. and Diploma in Mathematics**, *University of Bucharest*, Bucharest, Romania.

Appointments

- 2016–Present **Professor**, UNIVERSITY OF WISCONSIN-MADISON.
2013–2016 **Associate Professor**, UNIVERSITY OF WISCONSIN-MADISON.
2009–2013 **Assistant Professor**, UNIVERSITY OF WISCONSIN-MADISON.
Spring 2009 **Doctoral Faculty**, CITY UNIVERSITY OF NEW YORK, GRADUATE CENTER.
2007–2009 **Assistant Professor**, CITY UNIVERSITY OF NEW YORK, LEHMAN COLLEGE.
2007–2009 **Research Fellow**, COURANT INSTITUTE, NEW YORK UNIVERSITY.
2005–2007 **Research Assistant Professor**, UNIVERSITY OF ILLINOIS AT CHICAGO.
Spring 2006 **Courant Instructor**, COURANT INSTITUTE, NEW YORK UNIVERSITY.
1998–Present **Research Fellow**, INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY.

Honors and Awards

- 2021–2023 *Vilas Associates Award*, University of Wisconsin-Madison
2021–2023 *Romanian Ministry of National Education Grant (Co-PI)*, CNCS-UEFISCDI, project number PN-III-P4-ID-PCE-2020-0029
2021–2022 *UW-Madison Fall Competition Award*
2019–2023 *Van Vleck Professorship Research Award*, University of Wisconsin-Madison
2019–2021 *NSF conference award DMS-1933786 (Co-PI)*: “Hyperplane arrangements and singularities”
2019 *NSF conference award DMS-1904103*: “Non-isolated singularities and derived geometry”
2019 *Honored Instructor Award*, University of Wisconsin-Madison
2018–2023 *Simons Foundation Collaboration Grants for Mathematicians #567077*: “Topology of complex algebraic varieties”
2018–2019 *UW-Madison Fall Competition Award*
2017–2019 *Romanian Ministry of National Education Grant (Co-PI)*, CNCS-UEFISCDI, project number PN-III-P4-ID-PCE-2016-0030
2015–2017 *NSF conference award DMS-1462433*: “Stratified spaces in geometric and computational topology and physics”
2015–2016 *Visiting Scientist of the Chinese Academy of Sciences*
2013–2017 *NSF research grant DMS-1304999*: “Singular Spaces in Geometry and Topology”

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2013–2016 *NSA research grant* H98230-14-1-0130: “Singular Spaces in Geometry and Topology”
- 2013–2016 *Romanian Ministry of National Education Grant (Co-PI)*, CNCS-UEFISCDI, project number PN-II-ID-PCE-2012-4-0156
- 2013–2014 *Simons Foundation Collaboration Grants for Mathematicians #277891*: “Geometry and Topology of Singularities”
- 2012 *US Junior Oberwolfach Fellow*
- 2011–2013 *NSF conference award* DMS-1104329: “International Conference on Singularity Theory and Applications”
- 2010–2013 *NSF research grant* DMS-1005338: “Geometry and Topology of Singularities”
- 2010–2011 *UW-Madison Fall Competition Award* (declined)
- 2010 *The Dimitrie Pompeiu Mathematics Prize* of the Romanian Academy
- 2009–2010 *PSC-CUNY Research Award # 62295-00 40*
- 2008–2009 *PSC-CUNY Research Award (PSCOOC-39-20)*
- 2006 *NYU Research Challenge Fund Award*
- 2006 *NSF Travel Award* for attending the ICM 2006 (Madrid, Spain)

Research Interests

Topology of hypersurface singularities; Hyperplane arrangements
 Intersection homology, perverse sheaves and applications to singularities
 Characteristic classes of singular spaces
 Hodge theory
 Applications of topology and singularity theory to applied algebraic geometry

Publications

Books

- 2019 *Intersection Homology & Perverse Sheaves, with Applications to Singularities*, **Graduate Texts in Mathematics**, Vol. 281, Springer, Cham. ISBN: 978-3030276430.

Preprints

- 2021 *Non-abelian Mellin transformations and Applications*,
 arXiv:2107.05608.
 (with Y. Liu and B. Wang)
- 2021 *Constructible sheaf complexes in complex geometry and Applications*,
 arXiv:2105.13069.
 (with Jörg Schürmann)
- 2021 *Alexander modules, Mellin transformation and variations of mixed Hodge structures*,
 arXiv:2104.09729.
 (with E. Elduque, M. Herradón-Cueto and B. Wang)
- 2020 *The vanishing cohomology of non-isolated hypersurface singularities*,
 arXiv:2007.07064.
 (with L. Păunescu and M. Tibăr)
- 2020 *Mixed Hodge structures on Alexander modules*,
 arXiv:2002.01589.
 (with E. Elduque, C. Geske, M. Herradón-Cueto and B. Wang)

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/

Published / Accepted

- 2021 *Aspherical manifolds, Mellin transformation and a question of Bobadilla-Kollár*,
Journal für die reine und angewandte Mathematik (Crelle's Journal), accepted;
arXiv:2006.09295.
(with Y. Liu and B. Wang)
- 2021 *A Morse theoretic approach to non-isolated singularities and applications to optimization*,
Journal of Pure and Applied Algebra 226 (2022), Issue 3, 106865.
(with J. Rodriguez and B. Wang)
- 2021 *Vanishing cohomology and Betti bounds for complex projective hypersurfaces*,
Annales de l'Institut Fourier (accepted); arXiv:2004.07686.
(with L. Păunescu and M. Tibăr)
- 2021 *Hodge theory on Alexander invariants – a survey*,
in “Proceedings of 2019 Hyper-JARCS Conference”. **Topology and its Applications**
(accepted); arXiv:2101.06740.
(with E. Elduque, C. Geske, M. Herradón-Cueto and B. Wang)
- 2021 *Perverse sheaves on semi-abelian varieties*,
Selecta Mathematica 27 (2021), article 30.
(with Y. Liu and B. Wang)
- 2021 *Higher order degrees of affine plane curve complements*,
Indiana University Mathematics Journal 70 (2021), no. 1, 179–211.
(with E. Elduque)
- 2021 *Topology of subvarieties of complex semi-abelian varieties*,
International Mathematics Research Notices Vol. 2021, Issue 14, Pages 11169–11208.
(with Y. Liu and B. Wang)
- 2020 *Plethysm and cohomology representations of external and symmetric products*,
Advances in Mathematics 375 (2020), 107373.
(with J. Schürmann)
- 2020 *Defect of Euclidean distance degree*,
Advances in Applied Mathematics 121 (2020), 102101.
(with J. Rodriguez and B. Wang)
- 2020 *Euclidean distance degree of projective varieties*,
International Mathematics Research Notices (online); DOI: 10.1093/imrn/rnz266.
(with J. Rodriguez and B. Wang)
- 2020 *Spectral Hirzebruch-Milnor classes of singular hypersurfaces*,
Mathematische Annalen 377 (2000), no. 1-2, 281–315.
(with M. Saito and J. Schürmann)
- 2020 *Thom-Sebastiani theorems for filtered D -modules and for multiplier ideals*,
International Mathematics Research Notices Vol. 2020, no. 1, 91-111.
(with M. Saito and J. Schürmann)
- 2020 *Euclidean distance degree of the multiview variety*,
SIAM J. Appl. Algebra Geometry 4 (2020), no. 1, 28–48.
(with J. Rodriguez and B. Wang)
- 2020 *Notes on vanishing cycles and applications*,
Journal of the Australian Math Society 109 (2020), no. 3, 371–415.

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2020 *Perverse sheaves on semi-abelian varieties – a survey of properties and applications*,
European Journal of Mathematics 6 (2020), no. 3, 977–997.
(with Y. Liu and B. Wang)
- 2020 *Topological methods in algebraic geometry and algebraic statistics*,
Rev. Roumaine Math. Pures Appl. 65 (2020), no. 3, 311–325.
- 2019 *Homological congruence formulae for characteristic classes of singular varieties*,
European Journal of Mathematics 5 (2019), no. 4, 1267–1292.
(with S. Yokura)
- 2019 *Generic vanishing for semi-abelian varieties and integral Alexander modules*,
Mathematische Zeitschrift 293 (2019), no. 1-2, 629–645.
(with Y. Liu and B. Wang)
- 2018 *Mellin transformation, propagation, and abelian duality spaces*,
Advances in Mathematics 335 (2018), 231–260.
(with Y. Liu and B. Wang)
- 2018 *On the signed Euler characteristic property for subvarieties of abelian varieties*,
Journal of Singularities 17 (2018), 368–387.
(with E. Elduque and C. Geske)
- 2018 *Motivic zeta functions and infinite cyclic covers*,
In “Local and Global Methods in Algebraic Geometry”. **Contemp. Math.** 712 (2018),
117–141. (with M. Gonzalez Villa and A. Libgober)
- 2018 *Twisted Alexander invariants of complex hypersurface complements*,
Proceedings of the Royal Society of Edinburgh 148 (2018), no. 5, 1049–1073.
(with K. Wong)
- 2018 *Equivariant characteristic classes of external and symmetric products of varieties*,
Geometry & Topology 22 (2018), no. 1, 471–515.
(with J. Schürmann)
- 2017 *Characteristic classes of symmetric products of complex quasi-projective varieties*,
Journal für die reine und angewandte Mathematik 728 (2017), 35–63.
(with S. Cappell, J. Schürmann, J. Shaneson and S. Yokura)
- 2017 *Spectral pairs, Alexander modules, and boundary manifolds*,
Selecta Mathematica 23 (2017), no. 3, 2261–2290.
(with Y. Liu)
- 2017 *Characteristic varieties of hypersurface complements*,
Advances in Mathematics 306 (2017), 451–493.
(with Y. Liu).
- 2017 *Twisted Novikov homology of complex hypersurface complements*,
Mathematische Nachrichten 290 (2017), no. 4, 604–612.
(with S. Friedl)
- 2017 *Characteristic classes of mixed Hodge modules and applications*,
In “Schubert Varieties, Equivariant Cohomology and Characteristic Classes (Impanga 15)”.
EMS Series of Congress Reports (2017), 159–202.
(with J. Schürmann).
- 2016 *Motivic infinite cyclic covers*,
Advances in Mathematics 298 (2016), 413–447.
(with A. Libgober and M. Gonzalez Villa)

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2016 *Intersection spaces, perverse sheaves and string theory*,
In “Proceedings of the AMS Special Session on Singularities and Physics, Knoxville, 2014”.
Journal of Singularities 15 (2016), 118–125.
- 2016 *Hirzebruch-Milnor classes and Steenbrink spectra of certain projective hypersurfaces*,
In “Arbeitstagung Bonn 2013”. **Progress in Mathematics** 319 (2016), 265–287.
(with M. Saito and J. Schürmann).
- 2015 *Reidemeister torsion, peripheral complex, and Alexander polynomials of hypersurface complements*, **Algebraic & Geometric Topology** 15 (2015), 2757–2787.
(with Y. Liu)
- 2015 *Characteristic classes of singular toric varieties*,
Communications on Pure and Applied Mathematics 68 (2015), no. 12, 2177–2236.
(with J. Schürmann)
- 2014 *L^2 -Betti numbers of hypersurface complements*,
International Mathematics Research Notices Vol. 2014, no. 17, 4665–4678.
- 2014 *Intersection spaces, perverse sheaves and type IIB string theory*,
Advances in Theoretical and Mathematical Physics 18 (2014), no. 2, 363–399.
(with M. Banagl and N. Budur)
- 2013 *Characteristic classes of singular toric varieties*,
Electronic Research Announcements in Mathematical Sciences 20 (2013), 109–120.
(with J. Schürmann)
- 2013 *Hirzebruch-Milnor classes of complete intersections*,
Advances in Mathematics 241 (2013), 220–245.
(with M. Saito and J. Schürmann)
- 2013 *Characteristic classes of Hilbert schemes of points via symmetric products*,
Geometry & Topology 17 (2013), no. 2, 1165–1198.
(with S. Cappell, T. Ohmoto, J. Schürmann and S. Yokura)
- 2013 *Characteristic numbers, genera, and resolutions*,
In “Advances in Mathematics: Invited Contributions to the Seventh Congress of Romanian Mathematicians”. The Publishing House of the Romanian Academy, 2013, pp. 207–225.
- 2012 *Intersection spaces and hypersurface singularities*,
Journal of Singularities 5 (2012), 48–56.
- 2012 *Deformation of singularities and the homology of intersection spaces*,
Journal of Topology and Analysis 4 (2012), no. 4, 413–448.
(with M. Banagl)
- 2012 *Equivariant characteristic classes of complex algebraic varieties*,
Communications on Pure and Applied Mathematics 65 (2012), no. 12, 1722–1769.
(with S. Cappell, J. Schürmann and J. Shaneson)
- 2012 *Twisted genera of symmetric products*,
Selecta Mathematica 18 (2012), no. 1, 283–317.
(with J. Schürmann)
- 2011 *Symmetric products of mixed Hodge modules*,
Journal de Mathématiques Pures et Appliquées 96 (2011), no. 5, 462–483.
(with M. Saito and J. Schürmann)

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2011 *Hirzebruch invariants of symmetric products*,
In “Topology of Algebraic Varieties and Singularities”. **Contemp. Math.** 538 (2011),
163–177. (with J. Schürmann)
- 2011 *Hodge polynomials of singular hypersurfaces*,
Michigan Mathematical Journal 60 (2011), no. 3, 661–673.
(with A. Libgober)
- 2011 *On Milnor classes of complex hypersurfaces*,
In “Topology of Stratified Spaces”. **MSRI Publications** 58, Cambridge University Press
(2011), 161–175.
- 2010 *Characteristic classes of complex hypersurfaces*,
Advances in Mathematics 225 (2010), no. 5, 2616–2647.
(with S. Cappell, J. Schürmann and J. Shaneson)
- 2009 *Equivariant genera of complex algebraic varieties*,
International Mathematics Research Notices Vol. 2009, no. 11, 2013–2037.
(with S. Cappell and J. Shaneson)
- 2009 L^2 -Betti numbers of plane algebraic curves,
Michigan Mathematical Journal 58 (2009), no. 2, 411–421.
(with S. Friedl and C. Leidy)
- 2009 *Hodge genera of algebraic varieties, II.*,
Mathematische Annalen 345 (2009), no. 4, 925–972.
(with S. Cappell, A. Libgober and J. Shaneson)
- 2008 *Hodge-theoretic Atiyah-Meyer formulae and the stratified multiplicative property*,
In “Singularities I: Algebraic and Analytic Aspects”. **Contemp. Math.** 474 (2008),
145–167. (with J. Schürmann)
- 2008 *Intersection cohomology invariants of complex algebraic varieties*,
In “Singularities I: Algebraic and Analytic Aspects”. **Contemp. Math.** 474 (2008), 15–25.
(with S. Cappell and J. Shaneson)
- 2008 *Hodge genera and characteristic classes of complex algebraic varieties*,
Electronic Research Announcements in Mathematical Sciences 15 (2008), 1–7.
(with S. Cappell, A. Libgober and J. Shaneson)
- 2008 *Obstructions on fundamental groups of plane curve complements*,
In “Real and Complex Singularities”. **Contemp. Math.** 459 (2008), 117–130.
(with C. Leidy)
- 2008 *Hodge genera of algebraic varieties, I.*,
Communications on Pure and Applied Mathematics 61 (2008), no. 3, 422–449.
(with S. Cappell and J. Shaneson)
- 2008 *Euler characteristics of algebraic varieties*,
Communications on Pure and Applied Mathematics 61 (2008), no. 3, 409–421.
(with S. Cappell and J. Shaneson)
- 2007 *On the Alexander invariants of hypersurface complements*,
In “Singularity Theory”. Proceedings of the 2005 Marseille Singularity School and Confer-
ence, World Scientific, 2007, 725–744.
- 2007 *Multivariable Alexander invariants of hypersurface complements*,
Transactions of the American Mathematical Society 359 (2007), no. 7, 3505–3528.
(with A. Dimca)

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2006 *Higher-order Alexander invariants of plane algebraic curves*,
International Mathematics Research Notices 2006, Article ID 12976, 23 pp.
 (with C. Leidy)
- 2006 *Intersection homology and Alexander modules of hypersurface complements*,
Commentarii Mathematici Helvetici 81 (2006), no. 1, 123–155.
- 2005 *A decomposition theorem for the peripheral complex associated with hypersurfaces*,
International Mathematics Research Notices 43 (2005), 2627–2656.

Books Edited

- 2021 *Proceedings of the Tokyo 2019 Hyper-JARCS Conference*,
Topology and its Applications (in preparation).
 (with T. Fukui, T. Kohno, L. Paunescu, A. Suciu and M. Yoshinaga)
- 2021 *Proceedings of the 16th International Workshop on Real and Complex Singularities*,
Journal of Singularities (in preparation).
 (with M. Manoel, M. A. Ruas and D. Trotman)
- 2017 *Interactions between Low-dimensional Topology and Complex Algebraic Geometry*,
Oberwolfach Reports 14 (2017), no. 4, 2987–3033.
 (with S. Friedl and A. Suciu)
- 2012 *Proceedings of the Hefei International Conference on Singularity Theory and Applications*,
Journal of Singularities, vol. 5 (2012).
- 2011 *Topology of Stratified Spaces*,
MSRI Publications 58, Cambridge University Press, New York, 2011.
 (with G. Friedman, E. Hunsiker and A. Libgober)

Invited Talks

Conference Talks

- 06/2021 “*Singularities at Solstice*”, Lille, France
- 11/2020 “*16th International Workshop on Real and Complex Singularities*”, Online Workshop
- 06/2020 “*Arrangements at Home, II.*”, Online Workshop
- 12/2019 “*Hyperplane arrangements and Japanese-Australian workshop on Real and Complex Singularities*”, Tokyo, Japan
- 09/2019 Conference on “*Hodge Theory*” in Honor of Donu Arapura’s 60th Birthday, Madison, WI
- 07-08/2019 “*Non-Isolated Singularities and Derived Geometry: A celebration of the 60th birthday of David Massey*”, Cuernavaca, Mexico
- 06/2019 “*UIC Singularity Workshop*”, Chicago, IL
- 02/2019 “*The 14th Kagoshima Algebra-Analysis-Geometry Seminar*”, Kagoshima, Japan
- 09/2018 “*The 6th Franco-Japanese-Vietnamese Symposium on Singularities*”, Nha Trang, Vietnam
- 08/2018 “*MPS Conference on Singularities: Geometric, Topological, and Analytic Aspects*”, Simons Institute, New York City, NY
- 05/2018 “*Topology and Geometry: A conference in memory of Stefan Papadima*”, Bucharest, Romania
- 05/2018 “*Workshop for Young Researchers in Mathematics*”, Bucharest, Romania
- 04/2018 Special Session on “*Arrangements of Hypersurfaces*” at the Spring Eastern AMS Sectional Meeting, Northeastern University, Boston, MA

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/

- 04/2018 *"A Day of Singularities at Northeastern University"*, Boston, MA
- 05/2017 *"Workshop for Young Researchers in Mathematics"*, Bucharest, Romania
- 06/2016 *"Analysis, Geometry and Topology of Stratified Spaces"*, CIRM, Luminy, France
- 05-06/2016 *"Nonisolated Singularities"*, Lille, France
- 05/2016 *"Workshop for Young Researchers in Mathematics"*, Constanta, Romania
- 04/2016 *"MIST IV: Mathematics Inspired by String Theory"*, CUHK, Hong Kong
- 03/2016 *"Singularities and Topology Conference"*, Nice, France
- 12/2015 *"International Conference on Singularity Theory—in Honor of Henry Laufer's 70th Birthday"*, Sanya, China
- 09/2015 *"Geometry, Topology and Combinatorics of Hyperplane Arrangements and Related Problems"*, Zaragoza, Spain
- 07/2015 *"Topological methods in Singularity Theory"*, Edinburgh, UK
- 06-07/2015 Special Session on *"Geometry and Topology of Differentiable Manifolds and Algebraic Varieties"* at the Eighth Congress of Romanian Mathematicians, Iasi, Romania
- 05/2015 *"Workshop for Young Researchers in Mathematics"*, Constanta, Romania
- 04/2015 *"IMPANGA 15"*, Bedlewo, Poland
- 02/2015 *"Local and Global Invariants of Singularities"*, CIRM, Luminy, France
- 09/2014 Special Session on *"New Trends in Toric Varieties"* at the Central Fall AMS Sectional Meeting, Eau Claire, WI
- 08/2014 *"The 2nd Franco-Japanese-Vietnamese Symposium on Singularities"*, Sapporo, Japan
- 08/2014 *"Knots and Low Dimensional Manifolds"*, A Satellite Conference of Seoul ICM 2014, Busan, Korea
- 06/2014 *"Analysis and Topology in Interaction"*, Cortona, Italy
- 06/2014 *"Algebraic Geometry Summer Days in Bucharest"*, Bucharest, Romania
- 05/2014 *"Workshop for Young Researchers in Mathematics"*, Constanta, Romania
- 03/2014 Special Session on *"Singularities and Physics"* at the 2014 Southeastern Spring Sectional Meeting, Knoxville, TN
- 11/2013 *"Hyperplane Arrangements and Characteristic Classes"*, RIMS, Kyoto, Japan
- 09/2013 *"Algebra, Geometry and Topology of Singularities"*, Miraflores de la Sierra, Spain
- 08/2013 Clay Workshop on *"Mixed Hodge Modules and Their Applications"*, Oxford, UK
- 06/2013 Special Session on *"Singularities in Geometry and Topology"* at the 2nd PRIMA Congress, Shanghai, China
- 06/2013 *"Experimental and Theoretical Methods in Algebra, Geometry, and Topology"* (in honor of the 60th birthdays of A. Dimca and S. Papadima), Eforie Nord, Romania
- 06/2013 *"Motivic Invariants and Singularities Thematic Conference"*, Notre Dame University, South Bend, IN
- 02/2013 *"The 8-th Kagoshima Algebra-Analysis-Geometry Seminar"*, Kagoshima, Japan
- 01/2013 Special Session on *"Singularities in Geometry and Algebra"* at the AMS-MAA Joint Meeting, San Diego, CA
- 10/2012 Mini-Workshop *"Cohomology Rings and Fundamental Groups of Hyperplane Arrangements, Wonderful Compactifications, and Real Toric Varieties"*, Oberwolfach, Germany

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/

- 10/2012 Mini-Workshop "*Topology of Real Singularities and Motivic Aspects*", Oberwolfach, Germany
- 05/2012 AIM Workshop on "*Motivic Donaldson-Thomas theory and singularity theory*", Budapest, Hungary
- 03/2012 Special Session on "*Singularities in Commutative Algebra and Algebraic Geometry*" at the 2012 Spring Central Section Meeting, Lawrence, Kansas
- 09/2011 "*Iberian Meeting on Algebraic Analysis and Geometry*", Lisbon, Portugal
- 08/2011 "*Latin American School of Algebraic Geometry and Applications*", Cordoba, Argentina
- 07/2011 Seminar on "*Singularity Theory and Related Topics*", Beijing, China
- 06-07/2011 "*The Seventh Congress of Romanian Mathematicians*", Brasov, Romania
- 12/2010 Special Session on "*Complex Algebraic Geometry*" at the Joint Meeting of the AMS-SOMACHI, Pucón, Chile
- 11/2010 Special Session on "*Singularities in Algebraic Geometry*" at the 2010 Fall Central Section Meeting, Notre Dame, IN
- 06-07/2010 "*Summer School and Conference on Hodge Theory and Related Topics*", ICTP, Trieste, Italy
- 03/2010 Special Session on "*Homotopy Theory and Geometric Aspects of Algebraic Topology*" at the 2010 Spring Southeastern Sectional Meeting, Lexington, KY
- 12/2009 Special Session on "*Knot Theory and Related Topics*" at the Joint Meeting of the AMS-KMS, Seoul, Korea
- 09/2009 "*Singularities*", Oberwolfach, Germany
- 06/2009 "*Topology of Algebraic Varieties*", Jaca, Spain
- 07/2008 "*Algebraic Geometry, D-modules and Foliations*", Buenos Aires, Argentina
- 07/2008 "*International Conference in Algebraic Geometry*", IMAR, Bucharest, Romania
- 06/2008 "*Knot Theory: Fifty Years since Fox and Milnor*", Brandeis University
- 03/2008 "*Singularities in Geometry and Topology*", Courant Institute, NYC, NY
- 08/2007 Special Session on "*Higher Dimensional Geometry*" at the IV Iberoamerican Conference on Complex Geometry, Ouro Preto, Brazil
- 01/2007 AMS Special Session on "*Arrangements and Related Topics*", New Orleans, LA
- 08/2006 CIMPA-UNESCO-SPAIN School "*New Trends in Singularity Theory*", ICM 2006 Satellite Activity, Universidad Complutense de Madrid, Spain
- 08/2006 ICM Satellite Conference on "*Algebraic Geometry*", Segovia, Spain
- 08/2006 "*Recent Developments in Arrangements and Configuration Spaces*", MSRI, Berkeley, CA
- 07/2006 "*9-th International Workshop on Real and Complex Singularities*", ICMC-USP, Sao Carlos, Brazil
- 05/2006 "*International Symposium on Singularity Theory and its Applications*", Beijing, China
- 04/2006 AMS Special Session on "*Arrangements and Configuration Spaces*", Durham, NH
- 08/2005 "*Hyperplane Arrangements Workshop*", PIMS-UBC, Vancouver, Canada
- 03/2005 "*Submanifolds, Singular Varieties, and Stratified Spaces*", Courant Institute, NYC, NY
- 01-02/2005 "*Singularities*", CIRM-LUMINY, Marseille, France
- 10/2004 Workshop on "*Topology of Arrangements and Applications*", MSRI, Berkeley, CA
- 06/2004 "*Lehigh Geometry-Topology Conference*", Bethlehem, PA

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

Seminar Talks

- 06/2021 Institute of Mathematics of the Romanian Academy, Topology Seminar (online)
- 06/2021 University of Lille Colloquium – Lille, France
- 03/2021 University of Western Ontario Geometry and Combinatorics Seminar (online)
- 10/2020 Oxford Topology Seminar (online)
- 03/2020 University of Sydney Geometry & Topology Seminar – Sydney, Australia
- 02/2020 Sydney Mathematical Research Institute Informal Seminar (2 talks) – Sydney, Australia
- 02/2020 Sydney Mathematical Research Institute Seminar (2 talks) – Sydney, Australia
- 12/2019 Northeastern University Colloquium – Boston, MA
- 11/2019 University of Notre Dame Algebraic Geometry and Commutative Algebra Seminar – South Bend, IN
- 11/2019 University of Notre Dame Intersection cohomology and perverse sheaves Seminar – South Bend, IN
- 06/2019 Institute of Mathematics of the Romanian Academy, Algebraic Geometry Seminar – Bucharest, Romania
- 06/2019 East China Normal University Algebraic Geometry Seminar – Shanghai, China
- 06/2019 Soochow University – Suzhou, China
- 05/2019 Basque Center for Applied Mathematics – Bilbao, Spain
- 04/2019 NYU - Courant Institute Colloquium – NYC, New York
- 04/2019 Center for Applied Mathematics, Tianjin University – Tianjin, China
- 03/2019 NYU - Shanghai Colloquium – Shanghai, China
- 02/2019 Vanderbilt University Geometry Seminar – Nashville, TN
- 03/2018 Georgia Southern University Colloquium – Statesboro, GA
- 06/2017 KU Leuven Colloquium – Leuven, Belgium
- 06/2017 University of Münster Algebra & Geometry Seminar – Münster, Germany
- 05/2017 Institute of Mathematics of the Romanian Academy, Algebraic Geometry Seminar – Bucharest, Romania
- 04/2017 University of Melbourne Colloquium – Melbourne, Australia
- 04/2017 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 03/2017 University of Michigan Algebraic Geometry Seminar – Ann Arbor, MI
- 02/2017 University of Pennsylvania Colloquium – Philadelphia, PA
- 02/2017 University of Pennsylvania Geometry & Topology Seminar – Philadelphia, PA
- 10/2016 University of Colorado-Boulder Kempner Colloquium – Boulder, CO
- 10/2016 University of Colorado-Boulder Topology Seminar – Boulder, CO
- 06/2016 The London Geometry and Topology Seminar – Imperial College, London, UK
- 05/2016 MPIM Topology Seminar – Max Planck Institute, Bonn, Germany
- 04/2016 Hong Kong University Geometry Seminar – Hong Kong
- 02/2016 University of Lille Algebraic Geometry Seminar – Lille, France
- 12/2015 University of Heidelberg Colloquium – Heidelberg, Germany
- 11/2015 MPIM Algebraic Geometry Seminar – Max Planck Institute, Bonn, Germany
- 10/2015 KU Leuven Seminar in Number Theory and Algebraic Geometry – Leuven, Belgium
- 10/2015 Purdue University Topology Seminar – West Lafayette, IN

Department of Mathematics, University of Wisconsin-Madison

480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu

🏠 people.math.wisc.edu/~maxim/

- 10/2015 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 09/2015 Institute of Mathematics of the Romanian Academy, Algebraic Geometry Seminar – Bucharest, Romania
- 06/2015 East China Normal University Topology Seminar – Shanghai, China
- 10/2014 University of Pennsylvania Colloquium – Philadelphia, PA
- 06/2014 Institute of Mathematics of the Romanian Academy, Topology Seminar – Bucharest, Romania
- 11/2013 University of Missouri - St. Louis Colloquium – St. Louis, MO
- 10/2013 Vanderbilt University Geometry Seminar – Nashville, TN
- 07/2013 MPI-Oberseminar – Max Planck Institute, Bonn, Germany
- 07/2013 University of Science and Technology of China Geometry Seminar – Hefei, China
- 05/2013 University of Cologne Seminar on Low-Dimensional Topology – Cologne, Germany
- 02/2013 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 07/2012 University of Heidelberg Colloquium – Heidelberg, Germany
- 07/2012 East China Normal University Topology Seminar – Shanghai, China
- 06/2012 IMS-Chinese University of Hong Kong Geometry Seminar – Hong Kong
- 05/2012 CIMAT Algebraic Geometry Seminar – Guanajuato, Mexico
- 02/2012 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 02/2012 University of Wisconsin-Madison Geometry & Topology Seminar – Madison, WI
- 11/2011 New York University Geometric Analysis and Topology Seminar – New York City, NY
- 06/2011 East China Normal University Topology Seminar – Shanghai, China
- 03/2011 Michigan State University Algebra Seminar – East Lansing, MI
- 02/2011 Iowa State University Colloquium – Ames, IA
- 02/2011 University of Wisconsin-Madison Geometry & Topology Seminar – Madison, WI
- 01/2011 Northeastern University Colloquium – Boston, MA
- 07/2010 University of Heidelberg Topology Seminar – Heidelberg, Germany
- 04/2010 New York University Geometric Analysis and Topology Seminar – New York City, NY
- 02/2010 University of Illinois at Chicago Algebraic Geometry Seminar – Chicago, IL
- 11/2009 University of Notre Dame Algebra Seminar – South Bend, IN
- 10/2009 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 09/2009 University of Wisconsin-Madison Geometry & Topology Seminar – Madison, WI
- 02/2009 CUNY Commutative Algebra & Algebraic Geometry Seminar – New York City, NY
- 02/2009 Tulane University Colloquium – New Orleans, LA
- 02/2009 University of Iowa Colloquium – Iowa City, IA
- 01/2009 University of Wisconsin-Madison Colloquium – Madison, WI
- 01/2009 Rutgers University Colloquium – Piscataway, NJ
- 01/2009 UC Santa Cruz Colloquium – Santa Cruz, CA
- 01/2009 Syracuse University Colloquium – Syracuse, NY
- 12/2008 Purdue University Colloquium – West Lafayette, IN
- 09/2008 Ohio State University Algebraic Geometry Seminar – Columbus, OH
- 04/2008 CUNY-Graduate Center Topology Seminar – New York City, NY

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/

- 03/2008 CUNY-Lehman College CSM Scholarship Lecture – New York City, NY
- 03/2008 Wesleyan University Mathematics Colloquium – Middletown, CT
- 12/2007 Northeastern University Geometry-Algebra-Singularities-Combinatorics Seminar – Boston, MA
- 10/2007 University of Illinois at Chicago Algebraic Geometry Seminar – Chicago, IL
- 09/2007 Stony Brook University Algebra, Geometry and Physics Seminar – Stony Brook, NY
- 03/2007 University of Illinois at Chicago Algebraic Geometry Seminar – Chicago, IL
- 02/2007 CUNY-Lehman College Mathematics Colloquium – New York City, NY
- 02/2007 New York University Differential Geometry and Topology Seminar – New York City, NY
- 02/2007 University of Oregon Mathematics Colloquium – Eugene, OR
- 01/2007 University of Western Ontario Mathematics Colloquium – London, Ontario, Canada
- 12/2006 University of Wisconsin-Madison Algebraic Geometry Seminar – Madison, WI
- 10/2006 University of Chicago Algebraic Geometry Seminar – Chicago, IL
- 05/2006 University of Tokyo Topology Seminar – Tokyo, Japan
- 05/2006 Tokyo University of Science Seminar on "Singularity theory, geometry and related topics" – Tokyo, Japan
- 03/2006 Stony Brook University Algebra, Geometry and Physics Seminar – Stony Brook, NY
- 02/2006 University of Indiana–Bloomington Topology Seminar – Bloomington, IN
- 10/2005 University of Illinois at Chicago Graduate Student Colloquium – Chicago, IL
- 08/2005 University of Illinois at Chicago Algebraic Geometry Seminar – Chicago, IL
- 01/2005 Northeastern University Geometry-Algebra-Singularities-Combinatorics Seminar – Boston, MA
- 12/2004 University of Pennsylvania Geometry & Topology Seminar – Philadelphia, PA
- 09/2004 University of Illinois at Chicago Algebraic Geometry Seminar – Chicago, IL

Teaching Experience

- Fall 2021 *Elementary Topology* (Math 551), University of Wisconsin-Madison
Introductory Topology I (Math 751), University of Wisconsin-Madison
- Spring 2021 *Topics in Algebraic Topology* (Math 853), University of Wisconsin-Madison
- Fall 2020 *Elementary Matrix and Linear Algebra* (Math 340), University of Wisconsin-Madison
- Fall 2019 *Calculus and Analytic Geometry I* (Math 221), University of Wisconsin-Madison
- Summer 2019 *Elementary Matrix and Linear Algebra* (Math 340), University of Wisconsin-Madison
The Theory of Single Variable Calculus (Math 421), University of Wisconsin-Madison
- Spring 2019 *Calculus and Analytic Geometry I* (Math 221), University of Wisconsin-Madison
- Fall 2018 *Calculus and Analytic Geometry I* (Math 221), University of Wisconsin-Madison
- Summer 2018 *Elementary Matrix and Linear Algebra* (Math 340), University of Wisconsin-Madison
The Theory of Single Variable Calculus (Math 421), University of Wisconsin-Madison
- Spring 2018 *Algebraic Topology II* (Math 754), University of Wisconsin-Madison
- Fall 2017 *Linear Algebra and Differential Equations* (Math 320), University of Wisconsin-Madison
- Spring 2017 *Calculus* (Math 211), University of Wisconsin-Madison
- Fall 2016 *Honors Calculus I* (Math 375), University of Wisconsin-Madison

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- Topics in Algebraic Topology* (Math 853), University of Wisconsin-Madison
 Fall 2014 *Honors Calculus I* (Math 375), University of Wisconsin-Madison
Introductory Topology I (Math 751), University of Wisconsin-Madison
 Spring 2014 *Honors Calculus II* (Math 376), University of Wisconsin-Madison
Elementary Geometric and Algebraic Topology (Math 552), University of Wisconsin-Madison
 Fall 2013 *Algebraic Topology I* (Math 753), University of Wisconsin-Madison
 Spring 2013 *Introductory Topology II* (Math 752), University of Wisconsin-Madison
Geometry for College Students (Math 461), University of Wisconsin-Madison
Elementary Geometric and Algebraic Topology (Math 552), Undergraduate Directed Study, University of Wisconsin-Madison
 Fall 2012 *Topics in Algebraic Topology* (Math 853), University of Wisconsin-Madison
 Spring 2012 *Introductory Topology II* (Math 752), University of Wisconsin-Madison
 Fall 2011 *Calculus and Analytic Geometry I* (Math 221), University of Wisconsin-Madison
 Spring 2011 *Introduction to Modern Algebra* (Math 441), University of Wisconsin-Madison
 Fall 2010 *Introductory Topology I* (Math 751), University of Wisconsin-Madison
Algebraic Topology I (Math 753), University of Wisconsin-Madison
 Spring 2010 *Introductory Topology II* (Math 752), University of Wisconsin-Madison
Calculus and Analytic Geometry I (Math 221), University of Wisconsin-Madison
 Fall 2009 *Introductory Topology I* (Math 751), University of Wisconsin-Madison
 Spring 2009 *Financial Mathematics*, CUNY-Lehman College
Topology, CUNY-Graduate Center
 Fall 2008 *Precalculus*, CUNY-Lehman College
Probability, CUNY-Lehman College
 Spring 2008 *Analysis I*, CUNY-Lehman College
Calculus II Maple Lab, CUNY-Lehman College
 Fall 2007 *Calculus II*, CUNY-Lehman College
Calculus II Maple Lab, CUNY-Lehman College
 Spring 2007 *Advanced Topics in Geometric and Differential Topology*, University of Illinois at Chicago
 Fall 2006 *Applied Linear Algebra*, University of Illinois at Chicago
 Spring 2006 *Multivariable Calculus/Vector Analysis*, New York University
 Fall 2005 *Calculus III*, University of Illinois at Chicago
 Summer 2002 *Precalculus*, University of Pennsylvania
 Summer 2001 *Calculus*, University of Pennsylvania

Summer School Courses

- 2021 “*Topology of complex projective hypersurfaces and of their complements*, four 1.5-hour lectures at the *CIMPA Research School “Singularities and Applications”*, online, 07/2021
 2016 “*Characteristic Classes of Stratified Spaces*”, two 1-hour lectures at the *Topology, Stratified Spaces and Particle Physics Summer School*, Fields Institute, Toronto, Canada, 08/2016
 2016 “*Topology of Singularities*”, six 2-hour lectures at the *MIST IV Workshop*, CUHK, Hong Kong, 04-05/2016

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/

- 2015 “*Intersection Homology*”, six 2-hour lectures at the *2015 Geometry Summer School*, USTC, Hefei, China, 05-06/2015
- 2014 “*Basic introduction to Topology*”, five 2-hour lectures at the *2014 Geometry Summer School*, USTC, Hefei, China, 07/2014
- 2012 “*Introduction to Algebraic Topology*”, eight 3-hour lectures at the *2012 Geometry Summer School*, USTC, Hefei, China, 06/2012
- 2011 “*Topics in Algebraic Topology*”, thirteen 3-hour lectures at the *2011 Geometry Summer School*, USTC, Hefei, China, 05-07/2011
- 2010 “*Topics in Algebraic Topology*”, eight 2-hour lectures at the *2010 Geometry Summer School*, USTC, Hefei, China, 05-06/2010

Research Visits

- 2021 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 07/2021
- 2021 *Visiting Researcher at the Centre Européen Pour Les Mathématiques, La Physique Et Leur Interactions*, University of Lille (France), 06/01-06/30/2021
- 2020 *Visiting Researcher at the Sydney Mathematical Research Institute*, University of Sydney (Australia), 01/15-03/15/2020
- 2019 *East China Normal University* (Shanghai, China), 05-06/2019 (invited by Prof. Rong Du)
- 2019 *Basque Center for Applied Mathematics* (Bilbao, Spain), 05/2019
- 2019 *Center for Applied Mathematics, Tianjin University* (Tianjin, China), 04/2019
- 2018 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 05-06/2018
- 2017 *University of Science and Technology of China* (Hefei, China), 07/2017 (invited by Prof. Xiuxiong Chen)
- 2017 *University of Münster* (Münster, Germany), 06/2017 (invited by Prof. Jörg Schürmann)
- 2017 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 05-06/2017
- 2016 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 05-07/2016
- 2016 *Chinese University of Hong Kong* (Hong Kong), 04-05/2016 (invited by Prof. Conan Leung)
- 2016 *University of Münster* (Münster, Germany), 02/2016 (invited by Prof. Jörg Schürmann)
- 2016 *University of Heidelberg* (Heidelberg, Germany), 02/2016 (invited by Prof. Markus Banagl)
- 2015–2016 *Max Planck Institute* (Bonn, Germany), 08/2015–07/2016, sabbatical year
- 2015 *University of Münster* (Münster, Germany), 08/2015, 11/2015 (invited by Prof. Jörg Schürmann)
- 2015 *University of Science and Technology of China* (Hefei, China), 06/2015, 12/2015 (invited by Prof. Xiuxiong Chen)
- 2015 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 05-07/2015
- 2014 *University of Science and Technology of China* (Hefei, China), 07/2014 (invited by Prof. Xiuxiong Chen)
- 2014 *Institute of Mathematics of the Romanian Academy* (Bucharest, Romania), 05-07/2014
- 2013 *University of Münster* (Münster, Germany), 08/2013 (invited by Prof. Jörg Schürmann)
- 2013 *Max Planck Institute* (Bonn, Germany), 05-08/2013
- 2012 *University of Münster* (Münster, Germany), 07/2012 (invited by Prof. Jörg Schürmann)

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2012 *University of Heidelberg* (Heidelberg, Germany), 07/2012 (invited by Prof. Markus Banagl)
- 2012 *Chinese University of Hong Kong* (Hong Kong), 06/2012 (invited by Prof. Conan Leung)
- 2012 *University of Science and Technology of China* (Hefei, China), 06/2012 (invited by Prof. Xiuxiong Chen)
- 2012 *Centro de Investigación en Matemáticas* (Guanajuato, Mexico), 05/2012 (invited by Prof. Xavier Gómez Mont)
- 2011 *University of Science and Technology of China* (Hefei, China), 05-07/2011 (invited by Prof. Xiuxiong Chen)
- 2010 *Max Planck Institute* (Bonn, Germany), 07-08/2010
- 2010 *University of Münster* (Münster, Germany), 07/2010 (invited by Prof. Jörg Schürmann)
- 2010 *University of Heidelberg* (Heidelberg, Germany), 07/2010 (invited by Prof. Markus Banagl)
- 2010 *University of Science and Technology of China* (Hefei, China), 05-06/2010 (invited by Prof. Xiuxiong Chen)
- 2009 *University of Münster* (Münster, Germany), 07/2009 (invited by Prof. Jörg Schürmann)
- 2008 *University of Münster* (Münster, Germany), 07/2008 (invited by Prof. Jörg Schürmann)
- 2008 *University of Illinois at Chicago*, 04/2008 (invited by Prof. Anatoly Libgober)
- 2007–2009 *Research Fellow, at Courant Institute of Mathematical Sciences, NYU*
- 2006 *Research Scientist, at Courant Institute of Mathematical Sciences, NYU*, 07/2006, 12/2006 (invited by Prof. Sylvain Cappell)
- 2006 *Tokyo University of Sciences* (Tokyo, Japan), 05/2006 (invited by Prof. Mutsuo Oka)

Synergistic Activities

Conference organization

- 2021 *TIBĂR60 Conference*, celebrating Mihai Tibăr's 60th anniversary (online), September 10-11, 2021
- 2021 *Singularities in the Midwest*, online edition, March 10-14, 2021
- 2021 *Suzhou Workshop on Geometry, Combinatorics and Representation Theory*, Soochow University, Suzhou, China, July 12-15, 2021. (cancelled because of the COVID19 pandemic)
- 2020 *Singularities in the Midwest Workshop, VII.*, Madison, WI, March 20-22, 2020. (cancelled because of the COVID19 pandemic)
- 2019 *Special Session on Geometry and Topology of Singularities*, at the Fall Central Sectional AMS Meeting, University of Wisconsin-Madison, Madison, WI, September 14-15, 2019
- 2019 *Singularities in the Midwest Workshop, VI.*, Madison, WI, March 15-16, 2019
- 2018 *Special Session on Singularities in Geometry, Topology and Algebra*, at the Joint International Meeting of the American Mathematical Society and the Chinese Mathematical Society, Fudan University, Shanghai, China, June 11-14, 2018
- 2018 *Workshop for young researchers in mathematics*, Bucharest, Romania, May 17-18, 2018
- 2018 *Singularities in the Midwest Workshop, V.*, Madison, WI, March 23-24, 2018
- 2017 *Oberwolfach Mini-Workshop: Interactions between Low-dimensional Topology and Complex Algebraic Geometry*, Oberwolfach, Germany, October 22-28, 2017
- 2017 *Singularity Theory Conference*, East China Normal University, Shanghai, China, July 10-14, 2017

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

- 2017 *Workshop for young researchers in mathematics*, Bucharest, Romania, May 17-21, 2017
- 2017 *Singularities in the Midwest Workshop, IV.*, Madison, WI, March 17-19, 2017
- 2016 Focus Program on *Topology, Stratified Spaces and Particle Physics*, Fields Institute, Toronto, Canada, August 8-26, 2016
- 2016 *Workshop for young researchers in mathematics*, Constanta, Romania, May 18-21, 2016
- 2016 *Singularities in the Midwest Workshop, III.*, Madison, WI, March 21-24, 2016
- 2015 Special Session on *Singularities in Algebra, Geometry and Topology* at the 2015 Central Fall Sectional AMS Meeting, Chicago, IL, October 3-4, 2015
- 2015 *Computational Geometric Topology in Arrangement Theory*, ICERM-Brown University, July 6-10, 2015
- 2015 Special Session on *Geometry and Topology of Differentiable Manifolds and Algebraic Varieties* at the Eighth Congress of Romanian Mathematicians, Iasi, Romania, June 26 - July 1, 2015
- 2015 *Workshop for young researchers in mathematics*, Constanta, Romania, May 21-24, 2015
- 2015 *Stratified spaces in geometric and computational topology and physics*, Madison, WI, March 30-April 2, 2015
- 2013 Special Session on *Singularities in Geometry and Topology* at the 2nd PRIMA Congress, Shanghai Jiaotong University, Shanghai, China, June 24-28, 2013
- 2013 Special Session on *Singular Spaces in Geometry, Topology, and Algebra* at the Spring Western Sectional AMS Meeting, Boulder, CO, April 13-14, 2013
- 2012 *Singularities in the Midwest Workshop, II.*, Madison, WI, March 22-24, 2012
- 2011 *International Conference on Singularity Theory and Applications*, University of Science and Technology of China, Hefei, China, July 25-31, 2011
- 2010 *Singularities in the Midwest Workshop*, Madison, WI, March 19-20, 2010
- 2008 *Topology of Stratified Spaces*, MSRI Workshop, Berkeley, CA, September 8-12, 2008

Seminar organization

- 2012–present *Topology and Singularities Seminar*, University of Wisconsin-Madison
- 2010–2012 *Mathematics Colloquium*, University of Wisconsin-Madison
- 2009–2010 *Geometry and Topology Seminar*, University of Wisconsin-Madison
- 2008–2009 *Reading Seminar in Geometry and Topology*, CUNY-Graduate Center
- 2007–2008 *Differential Geometry and Lie Theory Seminar*, CUNY-Graduate Center
- 2006 *Differential Geometry and Topology Seminar*, Courant Institute (NYU)
- 2005–2007 *Algebraic Geometry and Number Theory Seminar*, University of Illinois at Chicago

Editor

- 2021 Guest Editor for *Proceedings of the Tokyo 2019 Hyper-JARCS Conference*, Topology and its Applications (in preparation)
- 2021 Guest Editor for *Proceedings of the 16th International Workshop on Real and Complex Singularities*, Journal of Singularities (in preparation)
- 2017–2018 Served on the Editorial Board of *Mathematics* (open access journal)
- 2012 Guest Editor for *Proceedings of the Hefei International Conference on Singularity Theory and Applications*, Journal of Singularities, vol. 5 (2012)

Department of Mathematics, University of Wisconsin-Madison
480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
🏠 people.math.wisc.edu/~maxim/

2011 Guest Editor for *Topology of Stratified Spaces*, MSRI Publications 58, Cambridge University Press, New York, 2011

Curriculum development

2019 Wrote a graduate textbook *Intersection homology & perverse sheaves, with applications to singularities*, published as a *Springer Graduate Texts in Mathematics*

2011–2012 Helped with restructuring the *Calculus Sequence* at the University of Wisconsin-Madison, under the *Madison Initiative for Undergraduates*

2009 Developed a *Financial Mathematics* course at the City University of New York, Lehman College

Reviewer

National Science Foundation (panelist)

National Security Agency

AMS Mathematical Reviews

Research Foundation Flanders (FWO) expert panel (member)

Referee for math journals

Mathematische Annalen; Crelle's Journal; Transactions of the American Mathematical Society; Advances in Mathematics; Compositio Mathematica; Annales de L'Institut Fourier; International Mathematical Research Notices; Proceedings of London Mathematical Society; *K*-theory; Selecta Mathematica; Journal of Topology; Journal of Topology and Analysis; Journal of Algebraic Geometry; Journal of Pure and Applied Algebra; Algebraic & Geometric Topology; Geometriae Dedicata; New York Journal of Mathematics; Proceedings of the American Mathematical Society; Journal of Singularities; European Journal of Mathematics; Canadian Journal of Mathematics; Topology and its Applications; Quarterly Journal of Mathematics; Homology, Homotopy, and Applications; etc.

Service at UW-Madison

University Service

2021–2024 *Physical Sciences Divisional Committee*

2013–2015 *Faculty Senate* (alternate)

2011–2013 *Faculty Senate*

Department Service

2021–2022 *Graduate Admissions Committee*

2018–2022 *Faculty Affairs Committee* (Committee Chair during 2021–2022): dealing with faculty promotions and review of probationary faculty.

2016–2021 *Conference/Special Lectures/Visitors Committee* (Committee Chair during 2017–2020): selecting distinguished lecturers, making funding decisions for long-term visitors, making funding decisions for conferences organized in Madison.

2020–2021 *Awards Committee*: dealing with faculty/staff/student award nominations.

2018–2021 *VISP/MA Committee*: dealing with recruiting master students from Chinese universities.

2018–2020 *Salary Committee*: dealing with merit raises and retention cases.

2016–2019 *Awards Committee*: dealing with award nominations for faculty and student awards.

2016–2018 *Undergraduate Program Committee*: dealing with implementation of technology in our Calculus sequence.

Department of Mathematics, University of Wisconsin-Madison

480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu

🏠 people.math.wisc.edu/~maxim/

- 2016–2017 *Budget Committee*: dealing with department budget decisions and allocation.
- 2014–2015 *Hiring Committee*: caucus representative for faculty hiring decisions.
- 2014–2015 *Graduate Program Committee*: dealing with graduate student affairs, policies and graduate course proposals.
- 2013–2015 *Undergraduate Advising Committee* (Committee Chair during 2014–2015): dealing with undergraduate advising.
- 2013–2014 *Fundraising/Newsletter Committee*: dealing with fundraising and editing the department newsletter.
- 2013–2014 *TA Evaluation/Policies & Procedures*.
- 2011–2012 *Madison Undergraduate Initiative Committee*: restructuring the calculus sequence at UW-Madison.
- 2010–2012 *Graduate Program Committee*: dealing with graduate student affairs, policies and graduate course proposals.
- 2009–2012 *Colloquium Committee*: running the department colloquium.
- 2009–2010 *Library Committee*.

Postdocs Mentored

- 2019–2022 Brian Hepler
- 2015–2017 Botong Wang
- 2015–2018 Alexandra Kjuchukova
- 2014–2017 Manuel Gonzalez Villa

Graduate Students

- 2024 Rajat Srivastava (Ph.D., UW-Madison), expected
- 2023 Alexander Hof (Ph.D., UW-Madison), expected
- 2019 Eva Elduque (Ph.D., UW-Madison)
- 2019 Christian Geske (Ph.D., UW-Madison)
- 2016 Kai Ho Wong (Ph.D., UW-Madison)
- 2016 Yun Su (Ph.D., UW-Madison)
- 2015 Yongqiang Liu (Ph.D., USTC, China)

Department of Mathematics, University of Wisconsin-Madison
 480 Lincoln Dr, Madison, WI 53706-1388

☎ (608) 262-2930 • 📠 (608) 263-8891 • ✉ maxim@math.wisc.edu
 🏠 people.math.wisc.edu/~maxim/