

CONTACT INFORMATION	<p>Mathematics Department University of Illinois at Urbana-Champaign 1409 W Green St. Urbana IL 61801</p> <p style="text-align: right;"><i>Phone:</i> 217-265-0883 <i>E-mail:</i> vesna@illinois.edu</p>
RESEARCH INTERESTS	Homotopy theory, derived algebraic geometry, arithmetic geometry
EMPLOYMENT	<p>University of Illinois at Urbana-Champaign Assistant Professor, August 2015 - present</p> <p>Max Planck Institute for Mathematics, Bonn, Germany Advanced researcher, August 2014 - July 2015</p> <p>Mathematical Sciences Research Institute, Berkeley, California Viterbi Endowed Postdoctoral Scholar, Spring 2014 semester</p> <p>Massachusetts Institute of Technology, Cambridge, Massachusetts C.L.E. Moore Instructor, September 2011 - January 2014</p> <ul style="list-style-type: none"> • Mentors: Mark Behrens, Haynes Miller
EDUCATION	<p>Northwestern University, Evanston, Illinois Ph.D., Mathematics, June 2011; Thesis title <i>“Duality for topological modular forms”</i></p> <ul style="list-style-type: none"> • Adviser: Paul Goerss <p>M.S., Mathematics, December 2007</p> <p>American University in Bulgaria, Blagoevgrad, Bulgaria B.A., Mathematics, May, 2006 B.A., Computer Science, May 2006</p>
AWARDS AND HONORS	<ul style="list-style-type: none"> - <i>UIUC Center for Advanced Study</i> <ul style="list-style-type: none"> • Fellow 2018-2019 - <i>NSF Research grants</i> <ul style="list-style-type: none"> • “Dualizing modules in algebra and geometry,” DMS-1307390 and DMS-1606479, 2013-2018 - <i>NSF Conference grants</i> <ul style="list-style-type: none"> • “Homotopy Theory: tools and applications,” DMS-1719242, 2017 • “Conference on Derived Algebraic Geometry: Picard groups, Brauer groups, and twists,” DMS-1700795, 2017 • “Midwest Topology Seminar,” DMS-1747457, 2017

- *AMS-Simons Travel Grant* 2011-2013
- *Best Doctoral Thesis Award* for the academic 2010-2011, Department of Mathematics, Northwestern University.
- *The Mathematical Association of America's Carl B. Allendoerfer Award*, with O. Stoytchev, for expository article *Touching the \mathbb{Z}_2 in three-dimensional rotations*, Math.Mag. 81 (2008), no. 5, 345-357.

PUBLICATIONS

1. *Anderson and Gorenstein duality*, with J.Greenlees, to appear in proceedings of Groups, Representations, and Cohomology conference in honor of Dave Benson.
2. *Classification of problematic subgroups of $U(n)$* , with J.Bergner, R.Joachimi, K.Lesh, and K.Wickelgren. To appear in Transactions of the AMS.
3. *Motivic Homotopical Galois Extensions*, with A.Beaudry, M.Kedziorek, M.Merling, and K.Hess. To appear in proceedings of the second Women in Topology workshop.
4. *Picard groups of higher real K-theory spectra at height $p-1$* , with D.Heard and A.Mathew. Compos. Math. 153 (2017), no. 9, 1820-1854.
5. *Galois action on the homology of Fermat curves*, with R.Davis, R.Pries, and K.Wickelgren. Directions in number theory, 57-86, Assoc. Women Math. Ser., 3, Springer, [Cham], 2016.
6. *The Picard group of topological modular forms via descent theory*, with A.Mathew. Geom. Topol. 20 (2016), no. 6, 3133-3217.
7. *Fibers of partial totalizations of a pointed cosimplicial space*, with A.Mathew. Proc. Amer. Math. Soc. 144 (2016), no. 1, 445-458.
8. *Fixed points of p -toral groups acting on partition complexes*, with J.Bergner, R.Joachimi, K.Lesh, and K.Wickelgren. Women in Topology: Collaborations in Homotopy Theory, Contemporary Mathematics, vol. 641, Amer. Math. Soc., Providence, RI, 2015, pp. 83-96.
9. *K-theory, reality, and duality*, with D.Heard. J. K-Theory 14 (2014), no. 3, 526-555.
10. *Descent for 2-primary topological modular forms. An Alpine Expedition through Algebraic Topology*, Contemporary Mathematics, vol. 617, Amer. Math. Soc., Providence, RI, 2014, pp. 241-258.
11. *Duality for topological modular forms*. Documenta Math. 17 (2012) 271-311.
12. *Touching the \mathbb{Z}_2 in three-dimensional rotations*, with O.Stoytchev. Math.Mag. 81 (2008), no. 5, 345-357.

SUBMITTED
PAPERS

1. *Galois action and cohomology of a relative homology group of Fermat Curves*, with R.Davis, R.Pries, and K.Wickelgren.
2. *Gross-Hopkins Duals of Higher Real K-theory Spectra*, with A.Beaudry and T.Barthel.
3. *On the ring of cooperations for 2-primary connective topological modular forms*, with M.Behrens, K.Ormsby, and N.Stapleton.

SELECTED

INVITED TALKS

1. Homotopy Theory in the Ecliptic, Reed College, August 2017
2. Conference on invertible objects and duality in derived algebraic geometry and homotopy theory, University of Regensburg, April 2017
3. Annual Meeting of the DFG-SPP 1786, University of Wuppertal, Germany, March 2017
4. Electronic Chromatic Theory Seminar, March 2017
5. Alpine Algebraic and Applied Topology Conference, Saas, Switzerland, August 2016
6. West Coast Algebraic Topology Summer School, University of Oregon, August 2016
7. Mathematics Colloquium, Reed College, April 2016
8. Mid-atlantic topology conference, Johns Hopkins University, March 2016
9. Cascade topology seminar, Portland State University, November 2015
10. Conference “Graduate Research Opportunities for Women”, Northwestern University October 2015
11. Midwest topology seminar, Wayne State University, October 2015
12. Conference “Advances In Homotopy Theory,” University of Strasbourg, June 2015
13. Colloquium, University of Osnabrück, October 2014
14. Barcelona topology workshop, October 2014
15. Modular Invariants in Topology and Analysis, Regensburg, September 2014.
16. Stable Homotopy Theory: Structured Ring Spectra and Their Invariants, Manchester, September 2014.
17. Reimagining the Foundations of Algebraic Topology, MSRI, April 2014.

SCIENTIFIC
PROGRAMS

PARTICIPATION

- *Derived Algebraic Geometry*, at the Mathematical Sciences Research Institute, January - March 2019
- *Homotopy Harnessing Higher Structures*, at the Isaac Newton Institute for Mathematical Sciences, July - October 2018
- *Homotopy theory, manifolds, and field theories*, at the Hausdorff Research Institute for Mathematics, May - July 2015
- *Algebraic Topology*, at the Mathematical Sciences Research Institute, January - May 2014

CONFERENCE
ORGANIZING

- *Mini-Workshop: Chromatic Phenomena and Duality in Homotopy Theory and Representation Theory*, March 4-10, 2018, at the Mathematisches Forschungsinstitut Oberwolfach, Germany. Co-organized with Tobias Barthel and Henning Krause.
- *Homotopy theory: tools and applications*, July 17-21, 2017, at the University of Illinois. Co-organized with Daniel Davis, Mark W. Johnson, and Charles Rezk.
- *Conference on invertible objects and duality in derived algebraic geometry and homotopy theory*, April 3-7, 2017, at the University of Regensburg, Germany. Co-organized with Paul Goerss, Akhil Mathew, Thomas Nikolaus, and Justin Noel.

- RECENT – Math 526 Algebraic Topology II
- TEACHING – Math 416 Abstract Linear Algebra - usual and honors sections
- EXPERIENCE – Math 402 Non-Euclidean Geometry
- Math 597 Reading Courses
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- ADVISING – Elizabeth Tatum, PhD student
- Dominic Culver, postdoc