## Iordan Ganev

Institute of Science and Technology Austria Am Campus 1 3400 Klosterneuburg Austria

**POSITION** 

Email: iganev@ist.ac.at Website: ivganev.github.io

Institute of Science and Technology Austria Postdoctoral Researcher, Tamás Hausel Group	2016 - present
EDUCATION	
University of Texas at Austin. Ph.D. in Mathematics	2010 - 2016

### Mathematical Sciences Research Institute

2014

Program Associate (visiting graduate student)

Miami University. B.Sc., Summa cum laude Majors: Mathematics, Statistics, Environmental Science

## Royal Holloway, University of London

2008 - 2009

2006 - 2010

Visiting undergraduate student

Advisor: David Ben-Zvi

## RESEARCH AND PUBLICATIONS

BROAD AREAS: representation theory, algebraic geometry, quantum algebra.

KEY WORDS: noncommutative geometry of quantum groups, wonderful compactification, hypertoric varieties, quiver varieties, quantization, Azumaya algebras.

- 1. I. Ganev. Quantizations of multiplicative hypertoric varieties at a root of unity. Journal of Algebra **506** (2018), 92–128
- 2. I. Ganev. The wonderful compactification for quantum groups. Journal of the London Mathematical Society, to appear.
- 3. D. Ben-Zvi, I. Ganev, D. Nadler. Wonderful asymptotics of matrix coefficient D-modules. In preparation.
- 4. I. Ganev, D. Jordan. Quantum Frobenius phenomena for character varieties and multiplicative quiver varieties. In preparation.
- 5. I. Ganev. Groups of square-free order. Rose-Hulman Undergraduate Mathematics Journal, Vol. 11, Issue 1, 2010.
- 6. I. Ganev, N. Solomon, K. Lucia, and B. Keane. Multiple Captures of Adult Prairie Voles are Correlated with Residency Status and Genetic Parentage. Journal of Mammalogy, Vol. 90, Issue 3, June 2009.
- 7. I. Ganev. Order dimension of subgroups. Rose-Hulman Undergraduate Mathematics Journal, Vol. 9, Issue 2, 2008.

## AWARDS

NSF Graduate Research Fellowship	2010 - 2015
Graduate Dean's Award, University of Texas	2014
NSF Research Training Grant Fellowship	2013 - 2014
Benjamin Harrison Scholarship	2006 - 2010
Astronaut Foundation Scholarship	2009
Barry M. Goldwater Foundation Scholarship	2008
Benjamin Harrison Scholarship Astronaut Foundation Scholarship	2006 - 2010 2009

#### Organizational Activities

• Summer School on Geometric Representation Theory, IST Austria

Co-organized with Asilata Bapat, Tamas Hausel, Maitreyee Kulkami, and Jacob Matherne

• Working group on the Geometric Satake Equivalence, MSRI Fall 2014 Graduate student seminar, co-organized with Ana Cariani and Arno Kret

• Workshop on Yangians and Quantum Loop algebras May 2014 Near Austin, TX; co-organized with Lee Cohn and David Jordan

• Categorical Representation Theory Seminar, UT Austin Spring, Summer 2012

• Algebraic Geometry Learning Seminar, UT Austin Spring 2012

### INVITED TALKS

- Conference on Moduli Spaces, Representation Theory, and Quantization, Kyoto, June 2019 (upcoming)
- Institut Fourier, Grenoble (Algebra and Geometry Seminar), May 2018
- University of Texas at Austin (Geometry seminar), February 2018
- Fields Institute (Representation Theory seminar), Toronto, January 2018
- University of Waterloo (Pure Mathematics seminar), January 2018
- Perimeter Institute (Mathematical Physics seminar), January 2018
- Transformation Groups Conference, Moscow, December 2017
- Conference on Geometric Representation Theory, University of Glasgow, July 2017
- Universität Erlangen-Nürnberg (Emmy Noether Seminar), January 2017
- University of Edinburgh, (MAXIMALS seminar), October 2016
- US-Mexico Conference on Representation theory, Categorification, and Noncommutative Algebra, University of Southern California, June 2016 (poster presentation)
- Conference on Algebraic Groups, Quantum Groups, and Geometry, University of Virginia, May 2016
- University of Maryland (Lie Groups Seminar), April 2016
- Conference on Symplectic Duality and Gauge Theory, Perimeter Institute, Waterloo, Canada, April 2016
- Texas Algebraic Geometry Symposium, University of Texas at Austin, April 2016 (poster presentation)

- Conference on Geometric and Categorical Representation Theory, Mooloolaba, Australia, December 2015
- University of Virginia (Algebra Seminar), November 2015
- University of California, Berkeley (GRASP Seminar), May 2015
- University of California, Davis, February 2015
- University of California, Berkeley, (GRASP seminar) September 2014
- AMS sectional meeting, Lubbock, TX, April 2014
- University of Edinburgh, March 2014

#### SELECTED CONFERENCES AND WORKSHOPS

Moduli Spaces, Representation Theory, and Quantization, Kyoto, Japan, June 2019 (upcoming)

Symplectic Representation Theory, CIRM Luminy, France, April 2019 (upcoming)

Enveloping Algebras and Geometric Representation Theory, Oberwolfach, Germany, November 2018 (upcoming)

Summer School on Geometric Representation Theory, IST Austria, July 2018

CIME School Geometric Representation Theory and Gauge Theory, Cetraro, Italy, June 2018

Helvetic Algebraic Geometry Seminar, Konolfingen, Switzerland, June 2018

Transformation Groups, Moscow, December 2017

Quantum geometric and algebraic representation theory, Hausdorff Research Institute for Mathematics, Bonn, October 2017

Conference on Geometric Representation Theory, University of Glasgow, July 2017

Summer School on Higgs Bundles and Character Sheaves, ICTP, Trieste, Italy, June 2017

Geometry and Representation Theory, Erwin Schrödinger Institute, Vienna, January 2017

Geometric Representation Theory and Beyond, Clay Mathematics Institute, Oxford, September 2016

US-Mexico Conference on Representation theory, Categorification, and Noncommutative Algebra, University of Southern California, May - June 2016

Algebraic Groups, Quantum Groups and Geometry, University of Virginia, May 2016

Symplectic Duality and Gauge Theory, Perimeter Institute, Waterloo, Canada, April 2016

Geometric and Categorical Representation Theory, Mooloolaba, Australia, December 2015

Graduate Summer School: Geometry of moduli spaces and representation theory, Park City Mathematics Institute, June-July 2015

Representation Theory and Geometry of Symplectic Resolutions, Northeastern University, May 2015

Workshop on Geometric Langlands and derived algebraic geometry, Centre International de Rencontres Mathématiques, Luminy, France, March-April 2015

EPSRC Symposium: Derived Categories, Algebra and Representation Theory, Warwick, UK, March 2015

Mathematical Aspects of Six-Dimensional Quantum Field Theories, UC Berkeley, December 2014

Categorical Structures in Harmonic Analysis, MSRI, November 2014

Conference on Geometric Representation Theory, and Summer School on Quiver Hecke algebras, Institut d'Études Scientifiques de Cargèse, Corsica, France, June 2014

Workshop on Yangians and Quantum Loop algebras, Austin, TX, May 2014

Workshop: "Towards the proof of the geometric Langlands conjecture", Jerusalem, Israel, March 2014

Summer School on Character sheaves, Kaiserslautern, Germany, September 2013

Gelfand Centennial Conference, MIT, Cambridge, MA, August 2013

Interactions between Noncommutative Algebra, Representation Theory, and Algebraic Geometry, MSRI, January 2013 (Introductory Workshop), April 2013 (Conference)

Categorical Representation Theory Workshop, Eugene, OR, August 2012

#### Teaching and Outreach

• Graduate Teaching Assistant (at UT):	
M373K and M373L: Algebraic Structures I and II	Spring 2016
M427J: Differential Equations with Linear Algebra	Fall 2015
M408M: Multivariable Calculus	Fall 2013

M408M: Multivariable Calculus

Fall 2012 M408C: Differential and Integral Calculus

• Direct Reading Program mentor:

Surya Raghavendran, Topic: The Beilinson-Bernstein localization theorem	Spring 2014
David Kao, Topic: Tensor products and Clifford algebras	Spring 2013

• Calculus Tutor Spring, Summer 2013

• Math Club: Young tableaux, symmetric polynomials, and representations February 2012

• Undergraduate Teaching Assistant (at Royal Holloway):

MN1025: Business Statistics Spring 2009 MT2300: Regression Analysis Autumn 2008

• Outreach Activities:

IST Open Campus	May 2017
AIMS Ghana Mathematics Camp	August 2017
Die Lange Nacht der Forschung	April 2018

#### References

David Ben-Zvi, University of Texas at Austin, benzvi@math.utexas.edu

David Jordan, University of Edinburgh, D. Jordan@ed.ac.uk

Tamás Hausel, IST Austria, tamas.hausel@ist.ac.at

Travis Schedler, Imperial College, London, trasched@gmail.com

Kobi Kremnitzer, University of Oxford, Yakov.Kremnitzer@maths.ox.ac.uk

Thomas Chen (teaching), University of Texas at Austin, tc@math.utexas.edu

# Languages

English (native), Bulgarian (native), German (intermediate), French (beginner).