

CHRISTOPHER BRAV

Institute for Advanced Study
School of Mathematics
1 Einstein Drive
Princeton, New Jersey 08540

brav@math.ias.edu
<http://www.math.ias.edu/~brav>

EMPLOYMENT	Member	Institute for Advanced Study	2013–present
	Assistant Professor	Kansas State University	2013–present
	Post-doctoral fellow	University of Oxford	2011–present
	Post-doctoral fellow	Leibniz Universität Hannover	2010–2011
	Visitor	Max Planck Institute for Mathematics	March 2010
	Post-doctoral fellow	University of Toronto	2008–2010

EDUCATION	Ph.D.	Queen’s University	2008
	M.Sc.	Queen’s University	2003
	B.A.	St. Olaf College	2002

RESEARCH INTERESTS Derived algebraic geometry and applications to categorification, quantisation, and low-dimensional topology

PUBLICATIONS AND PREPRINTS *The projective McKay correspondence.*
Int. Math. Res. Not. IMRN 2009, no. 8, 1355–1387.

Braid groups and Kleinian singularities.
Joint with Hugh Thomas.
Mathematische Annalen 2011, Volume 351, Number 4, 1005-1017.

Thin monodromy in $\mathrm{Sp}(4)$.
Joint with Hugh Thomas.
To appear in Compositio.
Preprint at <http://arxiv.org/abs/1210.0523>.

Symmetries and stabilization for sheaves of vanishing cycles.
Joint with V. Bussi, D. Dupont, D. Joyce, and B. Szendrői.
Preprint at <http://arxiv.org/abs/1211.3259>.

A Darboux theorem for derived schemes with shifted symplectic structure.
Joint with V. Bussi and D. Joyce.
Preprint at arXiv:1305.6302.

A Darboux Theorem for shifted symplectic structures on derived Artin stacks.
Joint with O. Ben-Bassat, V. Bussi, and D. Joyce.
Preprint at arXiv:1312.0090.

GRANTS *London Mathematical Society/Nuffield Foundation Undergraduate Research Bursary in Mathematics, 2013.*
Student: Matthew Booth, Merton College, University of Oxford.
Project: Fundamental domains for Calabi-Yau monodromy.

SELECTED TALKS

January 2014	<i>Algebraic geometry seminar</i> Columbia University, United States
November 2013	<i>Derived Algebraic Geometry Winter School</i> ETH, Switzerland
November 2013	<i>Math-Physics seminar</i> University of Pennsylvania, United States
October 2013	<i>Quiver Varieties</i> Simons Center, United States
October 2013	<i>Enumerative Geometry</i> Fields Institute, Canada
June 2013	<i>Higher Categories and Topological Quantum Field Theories</i> Erwin Schrödinger Institute, Austria
March 2013	<i>MAGIC algebraic geometry seminar</i> Imperial College, United Kingdom
December 2012	<i>Mirror symmetry seminar</i> University of Vienna, Austria
November 2012	<i>Algebra, Geometry and Physics of BPS States</i> Hausdorff Research Institute, Germany
February 2012	<i>COW algebraic geometry seminar</i> University of Warwick, United Kingdom
December 2011	<i>EGA algebraic geometry seminar</i> ICMS Edinburgh, United Kingdom
November 2011	<i>MAGIC algebraic geometry seminar</i> Imperial College, United Kingdom
May 2011	<i>Algebraic geometry seminar</i> Max Planck Institut für Mathematik, Germany
March 2011	<i>Séminaire Quantique</i> IRMA, Université de Strasbourg, France
November 2010	<i>Quantum Geometry of Moduli Spaces seminar</i> Aarhus University, Denmark
March 2010	<i>Math-Physics seminar</i> University of Pennsylvania, United States
February 2010	<i>Colloquium</i> Cornell University, United States
October 2009	<i>Southern Ontario groups and geometry workshop</i> Fields Institute, Canada
May 2009	<i>Triangulated categories and singularities</i> University of Paderborn, Germany
May 2009	<i>Connections in Geometry and Physics</i> Perimeter Institute, Canada
March 2009	<i>Algebraic Geometry, Representation Theory, and Topological Field Theories</i> AMS sectional meeting, United States
August 2008	<i>Conference in honour of Peter Orlik</i> Fields Institute, Canada

TEACHING

Pacific Institute for the Mathematical Sciences/University of British Columbia

May 2014	Geometry and Physics 2014, mini-course on Darboux theorems in derived algebraic geometry
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University of Oxford

Fall 2012	Tutorials for undergraduate course on algebraic curves
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Leibniz Universität Hannover

Spring 2010

Short course for Ph.D. students on sheaves, cohomology, and spectral sequences

University of Toronto

Spring 2010	Individual undergraduate reading course on smooth manifolds
Spring 2010	Linear algebra (MATA23)
Fall 2009	Groups and Symmetry (MATC01)
Winter 2009	Calculus II (MATA33)
Fall 2008	Groups and Symmetry (MATC01)

Queen's University

Fall 2007	Vector Analysis (Math 227)
Fall 2006	Vector Analysis (Math 227)
Summer 2006	Calculus II (Math 121)