Curriculum vitae David Ploog

Personal details

Name:	David Ploog
Date of birth:	28.4.1976 in Berlin, Germany
Family status:	Married, two children
Private address:	Vikingveien 14a 4043 Hafrsfjord Norway
Address:	University of Stavanger Institutt for matematikk of fysikk Kristine Bonnevies vei 22 4021 Stavanger, Norway
E-mail:	david.ploog@uis.no
Telephone:	0049 177-9639729

Degrees

1. Diploma thesis: 2000, Humboldt-Universität Berlin (supervisor Herbert Kurke)
   Title: Moduli spaces of framed vector bundles on ruled surfaces
2. Phd thesis: 2005, Freie Universität Berlin (supervisor Daniel Huybrechts)
   Title: Groups of autoequivalences of derived categories of smooth projective varieties
3. Habilitation: 2014, Leibniz University Hannover
   Title: Derived categories of algebraic surfaces

Employment history

1/2000 – 8/2000	stipendiary of the Graduiertenkolleg *Komplexe Methoden in der globalen Analysis*, HU Berlin
9/2000 – 7/2001	research assistant, Cologne
8/2001 – 9/2002	stipendiary of the Graduiertenkolleg
10/2002 – 9/2007	research assistent, FU Berlin
	stay abroad: MSRI, Berkeley, USA (2/2003–3/2003)
10/2007 – 12/2008	research assistant, Hannover
1/2009 – 12/2009	DFG stipend for Toronto, Canada
1/2010 – 4/2010	research assistant, Hannover
5/2010 – 3/2012	supported by DFG priority program 1388 *representation theory*
4/2012 – 9/2013	research assistant, Hannover
10/2013 – 9/2014	research assistant, Duisburg-Essen
10/2014 – 3/2015	professor by deputy, Bonn
4/2015 – 3/2016	professor by deputy, Hannover
4/2016 – 12/2016	research fellow, FU Berlin
1/2017 – 6/2017	BMS professor, FU Berlin
10/2017 – 9/2018	professor by deputy, Magdeburg
10/2018 – 9/2019	Professor, Hannover
12/2019 –	Assistant Professor, Stavanger

Publications

Peer-reviewed articles

[1] *Fourier-Mukai Transforms and Stable Bundles on Elliptic Curves*
(with Georg Hein). Beiträge zur Algebra und Geometrie 46 (2005), 423–434.

[2] *Equivariant Equivalences for Finite Group Actions*
arXiv:math/0508625. Adv. Math. 216 (2007), 62–74.

[3] *McKay correspondence for the Poincaré series of Kleinian and Fuchsian singularities*
(with Wolfgang Ebeling). arXiv:0809.2738. Math. Annalen 347 (2010), 689–702.

[4] *Poincaré series and Coxeter functors for Fuchsian singularities*
(with Wolfgang Ebeling). arXiv:0903.4692. Adv. Math. 225 (2010), 1387–1398.

[5] *P-Stability of Complexes on Curves and Surfaces*
(with Georg Hein). arXiv:0704.2512. Int. J. Math. 23/2 (2012), 1250048, 20 pages.

[6] *A geometric construction of Coxeter-Dynkin diagrams of bimodal singularities*
(with Wolfgang Ebeling). arXiv:1102.5024. Manuscripta Math. 140 (2013), 195–212.

[7] *Fourier-Mukai partners and polarised K3 surfaces*
(with Klaus Hulek). arXiv:1206.4558.
In: Arithmetic and Geometry of K3 Surfaces and Calabi–Yau Threefolds (editors L. Razu, M. Schütt, Y. Nui) Fields Institute Communications, Vol. 67. Springer, 2013.

[8] *Averaging t-structure and extension closure of aisles*
(with Nathan Broomhead and David Pauksztello). arXiv:1208.5691.
Journal of Algebra 394 (2013), 51–78.

[9] *Autoequivalences of toric surfaces*
(with Nathan Broomhead). arXiv:1010.1717.
Proceedings of the AMS, Vol. 142, Number 4 (2014), 1133–1146.

[10] *Postnikov-stability versus semistability of sheaves*
(with Georg Hein). arXiv:0901.1554. Asian J. Math. Vol. 18, No. 2 (2014), 247–262.

[11] *On autoequivalences of some Calabi–Yau and hyperkähler varieties*
(with Pawel Sosna). arXiv:1212.4604. Int. Math. Res. Notices 22 (2014), 6094–6110.

[12] *Spherical subcategories in algebraic geometry*
(with Andreas Hochenegger and Martin Kalck). arXiv:1208.4046.
Math. Nach. 289(11-12), 1450–1465 (2016).

[13] *Discrete derived categories I: homomorphisms, autoequivalences and t-structures*
(with Nathan Broomhead and David Pauksztello). arXiv:1312.5203.
Math. Z. 285(1), 39–89 (2017).

[14] *Discrete derived categories II: The silting pairs CW complex and the stability manifold*
(with Nathan Broomhead and David Pauksztello). arXiv:1407.5944.
J. London Math. Soc. (2) 93 (2016), no. 2, 273–300.

[15] *Stability of Picard sheaves*
(with Georg Hein). arXiv:1511.06550.
J. Geom. Phys., DOI: 10.1016/j.geomphys.2016.12.004.

[16] *Discrete triangulated categories*
(with Nathan Broomhead and David Pauksztello). arXiv:1512.01482.
Bulletin LMS 50 (1), 174–188 (2018)

[17] *Derived categories of resolutions of cyclic quotient singularities*
(with Andreas Krug and Pawel Sosna). arXiv:1701.01331.

Quarterly J. Math. 69 (2), 509–548 (2018)

[18] *Tilting chains of negative curves on rational surfaces*
(with Lutz Hille). arXiv:1703.09350.
Nagoya J. Math. 235, 26–41 (2019)

[19] *Spherical subcategories in representation theory*
(with Andreas Hochenegger and Martin Kalck). arXiv:1502.06838.

[20] *Exceptional sequences and spherical modules for the Auslander algebra of* $k[x]/(x^t)$
(with Lutz Hille). arXiv:1709.03618.
Pacific J. Math. 302(2), 599–625 (2019).

[21] *Rigid divisors on surfaces*
(with Andreas Hochenegger). arXiv:1607.08198.
Izv. Math. 84 (1), 146–185 (2020).

[22] *Displaying the cohomology of toric line bundles*
(with Klaus Altmann). arXiv:1903.08009.
Izv. Math. 84 (4), 683–693 (2020).

[23] *Functorially finite hearts, simple-minded systems in negative cluster categories, and noncrossing partitions*
(with Raquel Coelho Simoes and David Pauksztello); appendix by Coelho Simões, Pauksztello and Alexandra Zvonareva. arXiv:2004.00604.
Compos. Math. 158 (2022), no. 1, 211–243.

[24] *Partial compactification of stability manifolds by massless semistable objects*
(with Nathan Broomhead, David Pauksztello, David Ploog, Jon Woolf). arXiv:2208.03173

[25] *The heart fan of an abelian category*
(with Nathan Broomhead, David Pauksztello, David Ploog, Jon Woolf). arXiv:2310.02844

Review articles

[26] *Fourier-Mukai transforms and finite groups*
In: Oberwolfach Report No. 53/2005 (Heterotic Strings, Derived Categories, and Stacks).

[27] *Autoequivalences of toric surfaces*
In: Oberwolfach Report No. 21/2012 (Toric Geometry).

Teaching-related articles

[28] *How not to hang a picture on the wall — topology in school*
Preprint http://www.mathematik.hu-berlin.de/∼ploog/topology_in_school.pdf.

[29] *Der Mathematikkreis*
with Christine Günther and Bernd Wollring.
Beiträge zum Mathematikunterricht 2016, Band 3, 1189–1192; WTM-Verlag Münster.