

CURRICULUM VITAE

DENNIS S. KEELER

OFFICE

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WORK

Miami University – Associate Professor – 2007-present
Miami University – Assistant Professor – 2003-2007
Massachusetts Institute of Technology – Moore Instructor – 2000-2003
NSF Postdoctoral Fellow – 2000-2003

EDUCATION

University of Michigan – PhD in Mathematics – August 2000
Advisor: J.T. Stafford
Miami University – MA in Mathematics – August 1995
Miami University – BS in Math and Physics – Summa Cum Laude – May 1995

AWARDS AND GRANTS

National Security Agency Young Investigator’s Grant (2 year) – 2005-06
Dean’s Summer Grant – Summer 2004
Rackham Distinguished Dissertation Award – 2000
Sumner Myers Dissertation Prize – 2000
Wirt and Mary Cornwall Prize – 2000
Rackham Predoctoral Fellowship – 1999-2000

CURRICULUM DEVELOPMENT

Helped develop Top 25 Calculus and Online Calculus

PUBLICATIONS

Corrigendum to “Ample filters of invertible sheaves” [J. Algebra 259 (1) (2003) 243–283], J. Algebra **507** (2018), 592–598.
with K. Retert, *Noncommutative ampleness from finite endomorphisms*, J. Algebra **429** (2015), 236–252. MR 3320623
Ample filters and Frobenius amplitude, J. Algebra, **323** (2010), no. 10, 3039–3053. MR 2011f:14029
Fujita’s Conjecture and Frobenius amplitude, Amer. J. Math., **130** (2008), no. 5, 1327–1336. MR 2009i:14006
with D. Rogalski and J.T. Stafford, *Naïve noncommutative blowing up*, Duke Math J., **126** (2005), no. 3, 491–546. MR 2006g:14005
Appendix for: D. Arapura, *Frobenius amplitude and strong vanishing theorems for vector bundles*, Duke Math. J., **121** (2004), no. 2, 231–267. MR 2005d:14025

- Noncommutative ampleness for multiple divisors*, J. Algebra **265** (2003), no. 1, 299–311. MR 2004f:16045
- The rings of noncommutative projective geometry*, Advances in Algebra and Geometry (Hyderabad, 2001), Hindustan Book Agency, 2003, pp. 195–207, [arXiv:math.RA/0205005](#), MR 2005a:16040
- Ample filters of invertible sheaves*, J. Algebra **259** (2003), no. 1, 243–283. MR 2003m:14026
- Noncommutative ample divisors*, Ph.D. thesis, University of Michigan, 2000.
- Criteria for σ -ampleness*, J. Amer. Math. Soc. **13** (2000), no. 3, 517–532. MR 2001d:14003
- Noncommutative algebraic geometry*, Mathematics from a Christian Perspective (Grand Rapids, 1999), pp. 111–114, available on my home page.
- with L. Rodman and I. M. Spitkovsky, *The numerical range of 3×3 matrices*, Linear Algebra Appl. **252** (1997), 115–139. MR 97k:15062

SELECTED PRESENTATIONS (• = invited)

- “Twisted Cox rings” - AMS Special Session, Columbus, Mar. 2018
 - “Noncommutative ampleness from finite endomorphisms” - AMS Special Session, Denver, Oct. 2016
- Co-organizer (with Kim Retert) - Special Session on Noncommutative Algebraic Geometry, AMS Sectional Meeting, U of Kentucky, March 2010
- “How your computer does algebra” - Taylor University, Nov. 2008
 - “Non-Euclidean Geometry and the Shape of the Universe” - Miami University, Physics Colloquium, Oct. 2008
 - “How your computer does algebra” - Manchester College, Nov. 2006
 - “Vanishing theorems in noncommutative geometry” - AMS Special Session, Eugene, Nov. 2005
 - “Computation in noncommutative algebraic geometry” - AMS Special Session, Santa Barbara, Apr. 2005
 - “Noncommutative algebra” – short course, Abdus Salam International Centre for Theoretical Physics, Trieste, Italy – Aug. 2004
 - “Naïve noncommutative blowing-up” – AMS Regional Meeting, Athens, OH – Mar. 2004
 - “Naïve noncommutative blowing up” – Mittag-Leffler Institute, Sweden – Jan. 2004
- “Ample filters and Frobenius amplitude” - Joint Meetings – Jan. 2004
- “Noncommutative projective geometry” – U of Dayton – Nov. 2003
 - “Naïve noncommutative blowing up” – Purdue U – Mar. 2003
 - “Generalizations of Serre Vanishing” – U of Michigan – Mar. 2003
 - “Exotic noncommutative surfaces, II” – “Algebras, Actions, and Algorithms” special session, Joint Meetings – Jan. 2003
 - “Exotic noncommutative surfaces” – UW-Milwaukee Colloquium – Dec. 2002
 - “Twisted homogeneous coordinate rings over comm. rings” – Interactions between Alg. Geom. and Noncomm. Alg., Oberwolfach – April 2002
 - “Noncommutative curves and noncommutative surfaces” – Int’l Conference on Alg. and Geom., U of Hyderabad, India – Dec 2001
 - “Ample filters of invertible sheaves” – U of Washington – Nov 2001