CURRICULUM VITAE

Florin Ambro

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Personal

Born:	April 2, 1972, Constanta, Romania
Citizenship:	Romanian

Education

1995-1999	Johns Hopkins University, Baltimore USA Ph.D. May 1999; Advisor: Vyacheslav V. Shokurov M.A. May 1996
1990-1995	University of Bucharest, Romania B.A. *summa cum laude* July 1995

Employment

05/09-	Scientific Researcher II Institute of Mathematics "Simion Stoilow" of the Romanian Academy
05/08-04/09	Scientific Researcher III Institute of Mathematics "Simion Stoilow" of the Romanian Academy
07/07-04/08	Scientific Researcher Institute of Mathematics "Simion Stoilow" of the Romanian Academy
11/03-03/07	Twenty-First Century COE Kyoto Mathematics Fellow RIMS, University of Kyoto, Japan
02/02-10/03	Marie Curie Research Fellow University of Cambridge, UK
04/00-01/02	JSPS Research Fellow University of Tokyo, Japan
09/99-03/00	Visiting Assistant Professor University of California at Santa Barbara, USA
01/99-04/99	Substitute Teacher Bryn Mawr High School, Baltimore, USA

Awards, grants

2016	Simion Stoilow Prize of the Romanian Academy
2011-2014	CNCSIS Research Grant no. PN-II-RU-TE-2011-3-0097
2007-2008	Partially supported by Grant CEx05-D11/04.10.05
2005-2007	JSPS Research Grant no. 17740011
2002-2003	Marie Curie Research Fellowship
2000-2002	JSPS Research Fellowship
1998-1999	Partially supported by NSF Grant DMS-9800807
1995-1999	Graduate Student Fellowship of Johns Hopkins University
1990-1995	Undergraduate Scholarship of University of Bucharest
1989	1st prize, "Spiru Haret"Mathematical Contest, Buzău
1989	2nd prize, "Gheorghe Ţiţeica" Mathematical Contest, Râmnicu Vâlcea
1988	2nd prize, "Gheorghe Ţiţeica" Mathematical Contest, Craiova
1985	2nd prize, "Gheorghe Ţiţeica" Mathematical Contest, Craiova
1985	2nd prize, National Mathematical Olympiad, Tulcea

Research Interests

Algebraic Geometry. Classification theory, singularities.

Publications

1. *An injectivity theorem II*, preprint arXiv:1804.06337 (2018)

2. *Minimal models of semi-log-canonical pairs* (Joint with J. Kollár), preprint arXiv:1709.03540 (2017)

3. *On toric face rings I*, to appear in *Edge volume, part II*, F. Bogomolov and I. Cheltsov (Ed.), European J. Math. (2018)

4. *On toric face rings II*, to appear in *Multigraded Algebra and Applications*, V. Ene and E. Miller (Ed.), Springer Proceedings in Mathematics & Statistics (2018)

5. *Variation of log canonical thresholds in linear systems*, Int. Math. Res. Notices 14 (2016), pp. $4418 - 4448$

6. *Cyclic covers and toroidal embeddings*, in Spitsbergen volume, F. Bogomolov etal (Ed.), Eur. J. Math. 2(1) (2016), pp. $9 - 44$

7. *On representations by Egyptian fractions*, (Joint with M. Barcău) Rev. Roum. Math. Pures et Appl. 60(3) (2015), pp. $331 - 336$

8. *An injectivity theorem*, Compos. Math. 150(6) (2014), pp. $999 - 1023$

9. *Basic properties of log canonical centers*, in Classification of Algebraic Varieties, C. Faber, G. van der Geer, E. Looijenga (Ed.), EMS Series of Congress Reports, 2011, vol. 3, pp $38 - 48$

10. *On the classification of toric singularities*, in Proceedings of the Conference on Combinatorial Commutative Algebra and Computer Algebra (Mangalia 2008), V. Ene and E. Miller (Ed.), Contemporary Mathematics 502 (2009), pp. $1-4$.

11. *Recent advances in the theory of minimal models*, in Proceedings of the ICTAMI Conference (Alba Iulia 2007), D. Breaz (Ed.), Acta Universitatis Apulensis 15 (2008), pp. $9-17$

12. *Non-klt techniques*, in *Flips for 3-folds and 4-folds*, A. Corti (Ed.), Oxford Lecture Ser. Math. Appl., 35, Oxford Univ. Press, Oxford, 2007, pp $163-170$

13. *Asymptotically saturated toric algebras*, Tohoku Math. J., 59(1) (2007), pp. $39-55$

14. *Restrictions of log canonical algebras of general type*, J. Math. Sci. Univ. Tokyo, 13 (2006), pp. $409-437$

15. *The minimal log discrepancy*, in Proceedings of the Symposium "Multiplier ideals and arc spaces" (RIMS 2006), K. Watanabe (Ed.), RIMS Koukyuuroku 1550, pp. $121-130$

16. *The set of toric minimal log discrepancies*, Cent. Eur. J. Math, 4(3) (2006), pp. $358-370$

17. *Toric FGA algebras*, in Proceedings of Algebraic Geometry Symposium (Kinosaki 2005), A. Ishii (Ed.), pp. $15-18$

18. *A semiampleness criterion*, J. Math. Sci. Univ. Tokyo, 12(3) (2005), pp. $445-466$

19. *The moduli b-divisor of an lc-trivial fibration*, Compos. Math. 141(2) (2005), pp. $385-403$

20. *The nef dimension of log minimal models*, in Proceedings of the Symposium on Hodge Theory, Degeneration and Complex Surfaces, Tagajo (2004), S. Usui (Ed.), pp. $272-283$

21. *Nef dimension of minimal models*, Math. Ann. 330(2) (2004), pp. $309-322$

22. *Shokurov's boundary property*, J. Differential Geometry 67(2) (2004), pp. $229-255$

23. *Inversion of adjunction for non-degenerate hypersurfaces*, Manuscripta Math. 111(1) (2003), pp. $43-49$

24. *Quasi-log varieties*, in *Birational Geometry: Linear systems and finitely generated algebras. A collection of papers*. Iskovskikh, V.A. and Shokurov, V.V. (Ed.) Proceedings of Steklov Institute 240 (2003), pp. $220-239$

25. *Notes after Shokurov's pl-flips*, preprint 2001

26. *On the semi-continuity of minimal log discrepancies*, in Proceedings of Algebraic Geometry Symposium (Kinosaki 2000), K. Ohno (Ed.), pp. $191-195$

27. *On minimal log discrepancies*, Math. Res. Lett., 6(5-6) (1999), pp. $573-580$

28. *Ladders on Fano varieties*, J. Math. Sci, 94:1 (1999), pp. $1126-1135$

29. *The adjunction conjecture and its applications*, PhD thesis 1999, math.AG/9903060

30. *The locus of log canonical singularities*, preprint 1998, math.AG/9806067

Conference Talks

1. "The Shokurovs: workshop for birationalists", IBS Center for Geometry and Physics, Pohang, Korea, December 2017

2. "International Conference on Algebraic Geometry", YMSC, Tsinghua University, Beijing, December 2017

3. "Workshop on Birational Geometry", Laboratory of Algebraic Geometry, Higher School of Economics, Moscow, November 2017

4. "The Second Turkish-Romanian Mathematics Colloquium", Galatasaray University, Istanbul, October 2017

5. "Instruments of Algebraic Geometry", Bucharest, September 2017

6. "Stability, Boundedness and Fano varieties", BICMR, Beijing, August 2017

7. "Conference on Birational Geometry", Simons Foundation, New York, August 2017

8. "Workshop on Singularities, Linear Systems, and Fano Varieties", NCTS Taipei, April 2017

9. "2016 Pohang Mathematics Workshop", Busan, Korea, November 2016

10. "EMS Summer School on Multigraded Algebra and Applications", Moeciu de Sus, Romania, August 2016

11. "Workshop on Complex Projective Geometry", University of Bucharest, July 2016

12. "Conference on Positivity and Vanishing Theorems", Lille, June 2016

13. "Meeting of CNMB mathematicians", Ovidius University, Constanta, Romania, May 2016

14. "Workshop for Young Researchers in Mathematics", Ovidius University, Constanta, Romania, May 2016

15. "The first Romanian-Turkish mathematics colloquium", Ovidius University, Constanta, October 2015

16. "Workshop Collapsing Calabi-Yau manifolds", SCGP, Stony Brook, September 2015

17. "International Conference Mathematics & IT: Research and Education MITRE-2015", Moldova State University, Chisinau, July 2015

18. "Workshop Frontiers of rationality", Longyearbyen, Norway, July 2014

19. "Conference on Positivity, Vanishing Theorems and Applications", Lille, May 2014

20. "Mini Workshop on Birational Geometry", University of Tokyo, November 2013

21. "Anniversary Conference Faculty of Sciences - 150 years", Bucharest, August 2013

22. "Workshop on Complex Geometry", IMS, National University of Singapore, August 2013

23. "Algebraic Geometry Session, Joint International Meeting of the American Mathematical Society and the Romanian Mathematical Society", Alba Iulia, June 2013

24. "One Day Workshop on Algebraic Geometry", National Taiwan University, May 2013

25. "Workshop on Algebraic Geometry", Florence, Italy, September 2012

26. "Workshop on ACC for minimal log discrepancies and termination of flips", AIM, Palo Alto, USA, May 2012

27. "Workshop for Young Researchers in Mathematics", Ovidius University, Constanta, Romania, May 2012

28. "Symposium on Projective Algebraic Varieties and Moduli", Busan, Korea, February 2012

29. "The 19th National School on Algebra, Computer Algebra and Combinatorics", Univ. Ovidius-IMAR, September 2011

30. "French-Romanian Workshop on Complex Geometry", IMAR, Bucharest, July 2011

31. "Workshop for Young Researchers in Mathematics", Ovidius University, Constanta, Romania, May 2011

32. "7-th Bolyai-Gauss-Lobachevsky Conference", Cluj, Romania, July 2010

33. "Exploratory Workshop on Combinatorial Commutative Algebra and Computer Algebra", Mangalia, Romania, May 2008

34. "Workshop on Higher dimensional minimal model program", Warwick Mathematics Institute, UK, December 2007

35. "International Conference on Theory and Applications of Mathematics and Informatics", Alba Iulia, August 2007

36. Workshop "Hot Topics: Minimal and Canonical Models in Algebraic Geometry", MSRI, Berkeley, April 2007

37. Workshop "Multiplier ideals and arc spaces", RIMS, Kyoto, August 2006

38. Workshop "Numerical invariants of singularities and higher-dimensional algebraic varieties", American Institute of Mathematics, Palo Alto, August 2006

39. "Algebraic Geometry Symposium", Kinosaki, October 2005

40. 21st Century COE Workshop "Frontiers of Mathematics", RIMS, Kyoto, October 2005

41. "Singularity Theory and Commutative Algebra" Symposium, Hamanako, Japan, September 2005

42. "Algebraic Geometry Summer Seminar", Tambara, July 2005

43. "Workshop on Birational Geometry, Derived Categories and Singularities", Steklov Mathematical Institute, Moscow, June 2005

44. "Algebraic Geometry Summer Seminar", Kusatsu, July 2004

45. "Higher Dimensional Algebraic Geometry" Workshop, National Taiwan University, Taipei, March 2004

46. "Hodge theory, Degeneration and Complex Surfaces- Interaction between Algebraic Geometry with Topology" Symposium, Tagajo, Miyagi, Japan, March 2004

47. "Eager Annual Conference", Aussois, France, September 2003

48. "Special Year on Algebraic Geometry and Topology", Australian National University, Canberra, August 2003

49. "Workshop on Global Geometry of Algebraic Varieties", Universidad Complutense de Madrid, December 2002

50. "COW Seminar", University of Cambridge, September 2002
51. "EuroConference - Higher Dimensional Complex Geometry", Isaac Newton Institute for Mathematical Sciences, Cambridge, June 2002
52. "NOMADS meeting in Nottingham", Nottingham, April 2002
53. "Linear systems and finitely generated algebras" Seminar, Steklov Mathematical Institute, December 2001
54. "Algebraic Geometry Symposium", Kinosaki, October 2000
55. "Midwest Algebraic Geometry Conference", University of Missouri, October 1999
56. "Workshop on Singularities", Ohio State University, November 1998
57. "GAEL Conference", CIRM at Luminy, Marseille, March 1998

Seminar talks

1. The London Geometry and Topology Seminar, Imperial College London, March 2017
2. Department of Mathematics and Physics, Roma Tre University, Seminar of Geometry, February 2017
3. SCGP, Stony Brook, September 2015
4. IBS Center for Geometry and Physics (Pohang, Korea), Algebraic Geometry Seminar, November 2014, 2016
5. Colloquim, National Taiwan University, June 2013
6. Institute of Mathematics, Chinese Academy of Sciences, Beijing, March 2012, December 2017
7. Faculty of Mathematics, Higher School of Economics, Moscow, Laboratory of algebraic geometry and its applications, October 2011
8. Faculty of Mathematics, University of Bucharest, Algebra Seminar, May 2011
9. Imperial College London, MAGIC Seminar, March 2011
10. University of Strasbourg, Algebraic Geometry Seminar, October 2010
11. University of Freiburg, Algebraic Geometry Seminar, October 2010
12. Alexandru Ioan Cuza University, Iasi, Geometry Seminar, December 2009
13. Faculty of Mathematics, University of Bucharest, Seminar on Theory of Subvarieties, November 2009
14. Princeton University, Algebraic Geometry Seminar, October 2008
15. Johns Hopkins University, Algebraic Geometry-Number Theory Seminar, September 2008
16. KIAS (Seoul), Algebraic Geometry Seminar, January 2008
17. Sogang University, Workshop on Birational Geometry, January 2008
18. Ovidius University (Constanta), Algebra and Geometry Seminar, November 2007, April 2011, November 2012, December 2014, April 2016
19. University of Washington, Seattle, Algebra Seminar, January 2007

20. IMAR (Bucharest), Algebraic Geometry Seminar, December 2005, November 2007, February 2010, January, March, April, June 2011, October 2014, March 2016, February, March 2017, March 2018

21. Tohoku University (Sendai), Algebraic Geometry Seminar, November 2005, December 2006

22. Saitama University, Algebraic Geometry Seminar, July 2005

23. Tokyo Institute of Technology, Algebraic Geometry Seminar, January 2004, March 2005

24. Nihon University (Tokyo), Singularity Theory Seminar, January 2004, March 2005, November 2013

25. Tokyo University, Algebraic Geometry Seminar, May 2000, October 2001, June 2004, November 2013

26. University of Cambridge, Geometry Seminar, March 2003

27. University of Lille, Algebraic Geometry Seminar, October 2003

28. Osaka University, Algebraic Geometry Seminar, June 2001

29. National University of Singapore, Algebraic Geometry Seminar, February 2001

30. Kyoto University, Algebraic Geometry Seminar, June 2000, May 2004, October 2005, November 2006

31. University of Chicago, Algebraic Geometry Seminar, May 1999

Teaching experience

February 2012	Institute of Mathematics, Chinese Academy of Sciences
	Singularities in birational geometry, A series of six lectures
Fall 2011	SNS-B, IMAR
	Introduction to Toric Varieties - Instructor
October 2010	University of Strasbourg, France
	The canonical bundle formula, A series of six lectures
Spring 2009	Johns Hopkins University, USA
	Topics in Algebraic Geometry - Instructor
Fall 2008	Johns Hopkins University, USA
	Calculus II - Instructor
January 2008	Sogang University, Korea
	Stability of toric varieties, A series of six lectures
Fall 2007	Ovidius University, Constanta
	Algebraic Geometry - Instructor
February 2005	Pohang University of Science and Technology, Korea.
	Introduction to the Minimal Model Program, A series of six lectures delivered at the 6th Postech Algebraic Geometry Winter School

September 2003	University of Bath, UK
	Tutorial support for Alessio Corti's LMS/EPSRC Short Course *Higher-dimensional geometry*
1999-2000	University of California at Santa Barbara, USA
	Calculus II, Fall, Winter 99-00 - Instructor *Introduction to Differential Equations*, Fall, Winter 99-00 - Instructor
1999	Bryn Mawr High School, Baltimore, US
	AP Statistics, Spring 99 - Substitute Teacher
1996-1999	Johns Hopkins University, USA
	Linear Algebra, Summer 99 -Instructor *Differential Equations with Applications*, Summer 97,98 - Instructor, Fall 97, 98, 99, Spring 98 - Teaching Assistant *Calculus II*, Spring 97 - Teaching Assistant *Honors Multivariable Calculus*, Spring 96 - Teaching Assistant

Miscellany

Languages	Romanian (native), English (native level), Japanese (passed 2-kyu test)
PC skills	C, LaTeX