

**Curriculum Vita of
STEVEN DALE CUTKOSKY**

Address

Department of Mathematics, University of Missouri
Columbia, Missouri-65211, U.S.A

Education

Ph.D. 1985 Brandeis University, Waltham, MA 02254
B.S. 1981 Indiana University, Bloomington, IN 47003

Thesis Advisor: Professor Teruhisa Matsusaka

Research Areas

Algebraic Geometry and Commutative Algebra

Positions Held since Ph.D

- (1) Curator's Professor, University of Missouri, since December 2001.
- (2) General Member, Mathematical Sciences Research Institute, Aug 2002 - Dec 2002.
- (3) Professor, University of Missouri, since September 1995.
- (4) Visiting Professor, Chennai Mathematical Institute, Chennai (Madras), India, Oct 1999 - Jan 2000.
- (5) Visiting Professor, Northeastern University, Jan 2000 - June 2000.
- (6) Associate Professor, University of Missouri, Aug 1991-July 1995
- (7) Assistant Professor, University of Missouri, Aug 1989-July 1991
- (8) Visiting Professor, Universität Essen, Germany, May-June 1995
- (9) Visiting Professor, Chennai Mathematical Institute, Chennai (Madras), India, June 1994 - July 1994.
- (10) Visiting Professor, Tata Inst. of Fundamental Research, India, Spring 1991
- (11) Visiting Assistant Professor, Purdue University, Aug 1988-July 1989
- (12) Ritt Assistant Professor, Columbia University, Aug 1985-July 1988

Awards and Grants

- (1) NSF Research Grant: July 2008-June 2011.
- (2) University of Missouri President's Award for Research and Creative Activity, March 2004.
- (3) NSF Research grant: July 2003-June 2008.
- (4) Curators Professor at University of Missouri, since December, 2001.
- (5) NSF Research grant: July 2000-June 2003.
- (6) National Board of Higher Mathematics, Short Term Visitors Grant, Government of India, 10/99 - 1/00.
- (7) NSF Research grant: July 1997-June 2000.
- (8) NSF Research grant: July 1994-June 1997.
- (9) 1994 Chancellor's Award for Outstanding Faculty Research and Creative Activity in the Physical and Mathematical Sciences. (University of Missouri, Columbia).
- (10) NSF Research grant: July 1992-June 1994.
- (11) NSF Research grant: July 1990-June 1992.
- (12) Fulbright Research Grant: Jan 1991-April 1991.
- (13) NSF Research grant: July 1988-June 1990.
- (14) NSF Research grant July 1987-June 1988.
- (15) Sloan Pre Doctoral Fellow July 1984-June 1985.

Editorships

- (1) Illinois Journal of Mathematics, 1995–1998
- (2) Journal of Algebra, from January, 2005.

Book Edited

Proceedings of the Conference on Hilbert Schemes, Vector Bundles and their Interplay with Representation Theory, Columbia, Missouri (2002). Contemporary Math. (2003), American Mathematical Society.
Co-edited with Dan Edidin, Zhenbo Qin and Qi Zhang.

Conferences Organized

- (1) Summer School on Resolution of Singularities, June 12 - 30, 2006 at the Abdus Salam International Centre for Theoretical Physics - Trieste. (co-organized with Janos Kollár and Bernard Teissier).
- (2) Fields Institute Summer School and Conference on Valuation Theory and Integral Closures in Commutative Algebra, July 2 - 22, 2006 in Ottawa Canada. Co-organized with Sara Faradi, Franz-Viktor Kuhlmann and Irena Swanson.
- (3) Workshop on Resolution of Singularities, factorization of birational mappings and toroidal geometry, Dec. 11-16, 2004 at Banff International Research Station. (co-organized with Ed Bierstone, Kenji Matsuki, Phil Millman and Jarek Włodarczyk)

- (4) Research in Teams on Local Uniformization and Resolution of Singularities, August 16 - September 6, 2003 (co-organized with Franz-Viktor Kuhlmann).
- (5) Hilbert Schemes and Vector Bundles, University of Missouri, Columbia, April 5-7, 2002. (co-organized with Dan Edidin, Zhenbo Qin and Qi Zhang).
- (6) Algebra Weekend, University of Missouri, Columbia, Oct. 21-22, 2001. (co-organized with Hema Srinivasan).
- (7) Midwest Algebraic Geometry Conference, University of Missouri-Columbia, Oct. 9-10, 1999. (co-organized with Dan Edidin and Qi Zhang).
- (8) Commutative Algebra, AMS special session, Columbia, MO, November 1-3, 1996 (co-organized with H. Srinivasan).
- (9) Interactions between Commutative Algebra and Algebraic Geometry, Columbia, MO, May 28-30 1993 (Co-organized with Hema Srinivasan)
- (10) MidWest-Great Plains Workshop in Commutative Algebra, Columbia, MO, June 15-16 1991 (co-organized with J.Huckaba, I.Papick, H.Srinivasan and D.Weston)

Current Ph.D. Students

- (1) Vinh Pham An
- (2) Soumya Sanyal
- (3) Dwight Thieme

Ph.D. Students

- (4) Krishna Hanumantha. Thesis: "Toroidalization of Locally Toroidal Morphisms", May 2008, Post Doc at the University of Kansas, Lawrence.
- (5) Samar El-Hitti. Thesis: "Algebraic Resolution of Formal Ideals along a Valuation", May 2008, Assistant Professor at the New York City College of Technology (Cuny).
- (6) Olga Kashcheyeva. Thesis: "Monomialization of strongly prepared morphisms to surfaces", May 2003, Lecturer at the University of Illinois, Chicago.
- (7) Russell Goward, Thesis: "Principalization of ideals generated by monomials", May 2001. Assistant Professor at the University of the District of Columbia
- (8) Kent Neuerburg, Thesis: "On Puiseux series and resolution Graphs", May 1998. Associate Professor at Southeastern Louisiana State University.

Publications of Steven Dale Cutkosky

Journal Articles

- (1) *Growth of Rank 1 Valuation Semigroups* with Kia Dalili and Olga Kascheyeva, eprint arXiv:0809.3507. h.
- (2) *Finite generation of algebras associated to powers of ideals* with Juergen Herzog and Hema Srinivasan, eprint arXiv:08060566.
- (3) *Semigroups of valuations on local rings, II* with Bernard Teissier, to appear in American J. of Math.
- (4) *Resolution of Singularities for 3-folds in positive characteristic*, American J. of Math. 131 (2009), 59-127.
- (5) *Semigroups of valuations on local rings* with Bernard Teissier, Mich. Math. J. 57 (2008), 173-194.
- (6) *Duality and Tameness*, with Marc Chardin, Jürgen Herzog and Hema Srinivasan, Mich. Math. J. 57 (2008), 137-156.
- (7) *Algebraic Series and Valuation Rings over Nonclosed Fields*, with Olga Kashcheyeva, J. of Pure and Applied Algebra 212 (2008), 1996-2010.
- (8) *Failure of Tameness for Local Cohomology*, with Jürgen Herzog, J. of Pure and Applied Algebra 211 (2007), 428-432.
- (9) *Factorizations of birational extensions of local rings*, with Hema Srinivasan, eprint AC/0601393, Illinois Journal of Mathematics 51 (2007), 41-56 (volume in honor of Phil Griffith).
- (10) *Poincaré series of surface singularities*, Commutative Algebra, Geometric, Homological, Combinatorial and Computational Aspects, Lecture Notes in Pure and Applied Mathematics Volume 244, Chapman and Hall (2006), 49-58.
- (11) *Local Monomialization of Transcendental Extensions*, Journal of the Fourier Institute 55 (2005), 1517 – 1586.
- (12) *Asymptotic behavior of the length of local cohomology*, with Huy Tài Hà, Hema Srinivasan and Emanoil Theodorescu, Canadian J. Math. 57 (2005), 1178 – 1192.
- (13) *Arithmetic Macaulayfication of Projective Schemes*, with Huy Tài Hà, Journal of Pure and Applied Algebra 201 (2005), 49 – 61.
- (14) *Completions of Valuation Rings*, with Laura Ghezzi, Contemporary Math. 386 (2005), 13 – 34.
- (15) *Multi-graded algebras associated to surface singularities*, Contemporary Mathematics 390 (2005), 73 – 84.
- (16) *Monomialization of Strongly Prepared Morphisms to surfaces*, with Olga Kashcheyeva, Journal of Algebra 275 (2004), 275 - 320.
- (17) *Ramification of Valuations*, with Olivier Piltant, Advances in Mathematics 183 (2004), 1-79.
- (18) *The Structure of Morphisms*, in Algebra, arithmetic and geometry with applications, 273-281, Springer, Berlin, 2004.
- (19) *Poincaré Series of Resolutions of Surface Singularities*, with Anna Reguera and Jürgen Herzog, Transactions of the AMS 356 (2003), 1833 - 1874.

- (20) *Monomialization and Ramification of Valuations*, in Nato/Otan Advanced Research Workshop on “Commutative Algebra, Singularities and Computer Algebra”, 2003.
- (21) *Poincaré series of line bundles on varieties*, in A Tribute to C.S. Seshadri, Hindustan Book Agency, 2003, 220-240.
- (22) *Ramification of Valuations and Singularities*, Algebra and Geometry, Hindustan Book Agency, 2003, 147-158.
- (23) *Generically finite morphisms and simultaneous resolution of singularity*, Contemporary mathematics, 2003.
- (24) *Resolution of Morphisms*, in “Valuation Theory and its Applications. Volume I”, Fields Institute Communications, 2002, 117-140.
- (25) *Positivity and Complexity of Ideals Sheaves*, (with Lawrence Ein and Robert Lazarsfeld), Math. Annalen 321, (2001) 213-234.
- (26) *Isomorphism of complexes and lifts* (with Hema Srinivasan), in Geometric and combinatorial aspects of commutative algebra (Messina 1999), Lecture Notes in Pure and Applied Algebra 217, Dekker NY, 2001.
- (27) *Local Monomialization*, in Geometric and combinatorial aspects of commutative algebra (Messina 1999), Lecture Notes in Pure and Applied Algebra 217, Dekker NY, 2001.
- (28) *Towards a criterion for isomorphism of complexes*, (with Hema Srinivasan), in Ideal theoretic methods in commutative algebra, (Columbia MO 1999), Lecture Notes in Pure and Applied Mathematics 220, Dekker NY, 2001.
- (29) *Monomial resolutions of morphisms of algebraic surfaces* (with O. Piltant), Communications in Algebra 28 (Special Issue in honor of Hartshorne) (2000), 5935-5960.
- (30) *Valuations in Algebra and Geometry*, in Singularities in Algebraic and Analytic Geometry, Caroline Grant Melles, Ruth I Michler eds., Contemporary Mathematics 266 (2000), 45-64.
- (31) *Irrational Asymptotic Behaviour of Castelnuovo regularity*, Journal für die reine und angewandte Mathematik 522 (2000), 93-103.
- (32) *Vanishing of differentials along ideals and non-archimedean approximation* (with R. Hübl), Math. Annalen 317 (2000), 295-308.
- (33) *The algebraic fundamental group of the complement of a curve singularity* (with H. Srinivasan), J. algebra 230 (Buchsbaum Volume) (2000), 101-126.
- (34) *Simultaneous Resolution of Singularities*, Proc. Amer. Math. Soc. 128 (2000), 1905-1910.
- (35) *Local Monomialization and Factorization of Morphisms*, Astérisque 260 (1999).
- (36) *Asymptotic regularity of ideals*, the Proceedings of the 21st Symposium on Commutative Algebra, held in Tokyo, Japan, Nov. 23-26, 1999.
- (37) *Monomialization of Morphisms*, the Proceedings of the 21st Symposium on Commutative Algebra, held in Tokyo, Japan, Nov. 23-26, 1999.
- (38) *Asymptotic behaviour of the Castelnuovo-Mumford regularity*, (with J. Herzog and Ngô Việt Trung), Compositio Math. 118 (1999), 243-261.

- (39) *Cohen Macaulay coordinate rings of blowup schemes*, (with J. Herzog), *Comm. Math. Helvetici* 72 (1997), 605-617.
- (40) *Local factorization of birational maps*, *Advances in Math* 132 (1997), 167-315.
- (41) *Equivalence and finite determinacy of mappings*, (with H. Srinivasan), *Journal of Algebra* 188 (1997), 16-57.
- (42) *Simple connectedness of projective varieties*, *Proc. Amer. Math. Soc.* 125 (1997), 679-684.
- (43) *Purity of the branch locus and Lefschetz theorems*, *Compositio Math.* 96 (1995), 173-195.
- (44) *A vanishing theorem for local rings*, Appendix to *Adjoints of ideals in regular local rings*, J. Lipman, *Mathematical Research Letters* 1 (1994), 752-754.
- (45) *Purity of the Branch Locus*, in *Commutative Algebra*, W. Bruns, J. Herzog, M. Hochster, U. Vetter, eds, Verlag Druckerei Runge GmbH, Cloppenburg, (1994), 47-50.
- (46) *Complete ideals in algebra and geometry*, *Contemporary Math.*, 159 (1994), 27-39.
- (47) *Periodicity of the fixed locus of multiples of a divisor on a surface*, (with V. Srinivas), *Duke Math. J.* 72 (1993), 641-647.
- (48) *An intrinsic Criterion for Isomorphism of Singularities*, (with H. Srinivasan), *Amer. J. Math* 115 (1993), 789-822.
- (49) *Local fundamental groups of surface singularities in characteristic p* , (with H. Srinivasan), *Comment. Math. Helvetici* 68 (1993), 319-332.
- (50) *On a problem of Zariski on dimensions of linear systems*, (with V. Srinivas), *Annals of Mathematics*, 137 (1993), 531-559.
- (51) *When are the blow ups of two ideals the same scheme?*, *Communications in Algebra*. 19 (1991), 1119-1124.
- (52) *Symbolic algebras of monomial primes*, *Journal für die reine und angewandte Mathematik (Crelle's Journal)*. 416 (1991), 71-89.
- (53) *A new characterization of rational surface singularities*, *Inventiones Math.* 102 (1990), 157-177.
- (54) *On Fano 3-folds*, *Manuscripta Math.* 64 (1989), 189-204.
- (55) *On unique and almost unique factorization of complete ideals II*, *Inventiones Math.* 98 (1989), 59-74.
- (56) *On unique and almost unique factorization of complete ideals*, *Amer. J. Math.* 111 (1989), 417-433.
- (57) *Weil divisors and symbolic algebras*, *Duke Math. J.* 57 (1988), 175-183.
- (58) *Elementary contractions of gorenstein threefolds*, *Math. Ann.* 280 (1988), 521-525.
- (59) *Factorization of complete ideals*, *J. Algebra* 115 (1988), 144-149.
- (60) *Zariski decomposition of divisors on algebraic varieties*, *Duke Math. J.* 53 (1986), 149-156.

Books

- (61) *Toroidalization of dominant morphisms of 3-folds*, Memoirs of the AMS, Volume 190, American Mathematical Society, Providence (2007), 222 pages.
- (62) *Resolution of Singularities*, AMS Graduate Studies in Mathematics 63, American Mathematical Society, Providence (2004), 186 pages.
- (63) *Monomialization of Morphisms from 3 Folds to Surfaces*, Springer Lecture notes, LNM 1786 (2002), 235 pages.
- (64) *Local Monomialization and Factorization of Morphisms*, Astérisque no. 260 (1999), 143 pages.

Featured Review

My paper *Local Factorization of Birational Maps*, Advances in Math 132 (1997), 167-315 is the subject of the “featured review” 99c:14018 in Mathematical Reviews.

INVITED TALKS

- (1) Special session on local and homological methods in commutative algebra, AMS meeting, Urbana, Illinois, March 28, 2009, “Asymptotic Growth of Algebras Associated to Powers of Ideals”.
- (2) Fifth Meeting for Young Mathematicians in Sedano, (in Sedano, Spain), Course of lectures on Valuations, Feb 12 - 21, 2009.
- (3) Workshop in Algebra, Geometry and Topology, IIT Madras, Course of lectures on Resolution of Singularities, Dec. 22, 2008 - Jan 3, 2009.
- (4) Singularities Seminar, Nihon University, Tokyo, “Toroidalization and Resolution of Logarithmic Differential Forms”, Dec. 8, 2008.
- (5) Commutative Algebra Seminar, Meiji University, Tokyo, “Hilbert Functions Associated to Saturated Powers of Ideals”, Dec. 6, 2008.
- (6) Workshop on Resolution of Singularities, RIMS Kyoto, Dec. 1-5, 2008.
- (7) Conference at Tulane associated with Clifford Lectures, “Local Monomialization of Morphisms”, Nov. 15, 2008.
- (8) University of Michigan Commutative Algebra Seminar, “Asymptotic Growth of Algebras Associated to Powers of Ideals”, October 23, 2008.
- (9) Special Session on Hilbert Functions and Free Resolutions, Vancouver, Oct. 4, 2008, “Asymptotic Growth of Generalized Symbolic Algebras”.
- (10) Commutative Algebra and interactions with Algebraic Geometry, CIRM, Marseille-Luminy, September 30, 2008, “Asymptotic Growth of Semigroups of Valuations”.
- (11) Workshop on Resolution of Singularities, Clay Math. Institute, September 22 -23, 2008.
- (12) University of Valladolid, Algebraic Geometry Seminar, Feb. 20, 2008, “Asymptotic Properties of Powers of Ideals”.
- (13) University Autónoma of Madrid, Algebraic Geometry Seminar, Feb. 18, 2008, “Monomialization of Morphisms”.

- (14) Seville Conference on Combinatorial and Computational Commutative Algebra, Feb. 13, 2008, “Semigroups of Valuations”.
- (15) University of Versailles, Algebraic Geometry Seminar, Feb. 5, 2008, “Local Strong Factorization of Birational Morphisms”.
- (16) University of Paris 7, Singularities Seminar, Feb. 4, 2008, “Algebraic Series over Non Closed Fields”.
- (17) University of Essen Oberseminar, Jan. 31, 2008, “Toroidalization of Morphisms”.
- (18) University of Paris, 7, Mini conference on algebraic geometry, “Local Cohomology of Powers of ideals”.
- (19) IIT, Madras, Colloquium Talk, Jan. 17. 2008, “Monomialization of Morphisms”.
- (20) CIMPA Conference on Commutative Algebra, IIT Bombay, Mumbai Jan. 9, 2008, “Properties of High Powers of Ideals”.
- (21) Commutative Algebra Conference in Honor of Juergen Herzog, Cortona, Italy, Sept 19, 2007, “Asymptotic Properties of Ideals”.
- (22) KUMUNU Conference, Lincoln, Nebraska, Sept. 8, 2007, “Semigroups of Valuations on Local Rings”
- (23) Workshop on Commutative Algebra and Algebraic Geometry, BIRS, Banff, Canada, June 13, 2007, “Nontame Rees Algebras”.
- (24) Special Session on Commutative Algebra and Algebraic Geometry, AMS meeting, Davidson, NC., March 4 2007, “Pathological asymptotic behavior of Local Cohomology”.
- (25) Special Session on Commutative Algebra and Algebraic Geometry, AMS meeting, New Orleans, January 8, 2007, “Failure of Tameness for Local Cohomology”.
- (26) Algebraic Geometry Seminar, University of Versailles (France), November 21, 2006, “Torodalization of morphisms I”.
- (27) Algebraic Geometry Seminar, University of Versailles (France), November 28, 2006, “Torodalization of morphisms II”.
- (28) Workshop on Syzygies and Hilbert Functions, BIRS, Banff, Canada, October 18. 2006, “Failure of tameness for local cohomology”.
- (29) Fields Institute Summer School and Conference on Valuation Theory and Integral Closures in Commutative Algebra, Ottawa, Canada, July 2 - 22, 2006, “Geometric theory of local rings”: 3 lectures.
- (30) Summer School on Resolution of Singularities, ICTP, Trieste, Italy, June 12 - June 30, 2006. “Basics of Algebraic Geometry”: 3 lectures, “Monomialization and Torodalization of Morphisms”: 3 lectures.
- (31) Algebre Commutative et Geometrie Algebrique, CIRM, Marseille-Luminy, May 25, 2006, “Differential Forms and Toroidalization”.
- (32) Special Session on Commutative Algebra and Algebraic Geometry, AMS meeting, Miami, Florida, April 1, 2006, “Logarithmic Differential Forms”.
- (33) Special Session on Syzygies in Commutative Algebra and Geometry, AMS meeting, San Antonio, Texas, January 12, 2006, “Efficient Toroidalization of Morphisms”.
- (34) Algebra Seminar Talk, University of Kansas, Lawrence, November 10, 2005, “Hypersurfaces of maximal contact and toroidalization”.
- (35) Colloquium Talk, University of Kansas, Lawrence, November 10, 2005, “Algebraic Mappings”.

- (36) Midwest Algebra, Geometry and their Interactions Conference, University of Notre Dame, October 8, 2005, "Toroidalization of Projective Morphisms".
- (37) Commutative Algebra Conference, honoring the contributions of Phillip Griffith, Urbana, Illinois, September 17, 2005, "On understanding valuations through power series".
- (38) Indian Institute of Technology (IIT), Bombay, July 8, 2005, "Toroidalization of Morphisms".
- (39) Special session on Hilbert Functions, Joint meeting of AMS/DMV, Mainz Germany, June 18, 2005, "Poincare Series and Hilbert Functions of Surface Singularities".
- (40) University of Barcelona, June 15, 2005, "The Toroidalization and Factorization of Morphisms of Projective varieties".
- (41) Seminaire sur les Singularites, University of Paris VII, June 13, 2005 "Toroidalization of Morphisms".
- (42) Nebraska Commutative Algebra Confrence: Wiegandfest, May 9, 2005, "Toroidalization of Morphisms".
- (43) Algebra Seminar Talk, University of Illinois Chicago, March 24, 2005, "Toroidalization of Morphisms".
- (44) Colloquium Talk: Tulane University, March 17, 2005, "Polynomial Mappings".
- (45) Special Session on Commutative Algebra, AMS meeting, Atlanta, Georgia, Jan 5 - 8. 2005, "Graded Algebras Associated to Surface Singularities".
- (46) Workshop on Resolution of singularities, Factorization of Birational Mappings and Toroidal Geometry, Dec 11-16, 2004 at the Banff International Research Station, Banff, Canada, Lecture series of three 50 minute talks on "Toroidalization of Morphisms".
- (47) Special Session on Algebraic Geometry and Commutative Algebra, AMS meeting, Nashville, TN, October 16 - 17, 2004, "Graded Algebras Associated to Surface Singularities".
- (48) Colloquium Talk: University of Nebraska, Oct. 8, 2004, "Algebraic Mappings of 3-folds".
- (49) Workshop on Commutative Algebra, Sept. 11-16, 2004 at the Banff International Research Station, Banff, Canada, "Toroidalization of birational morphisms of 3-folds".
- (50) Conference on Commutative Algebra and Interactions with Algebraic Geometry and Combinatorics, June 5-12, 2004 at The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, "Toroidalization of birational morphisms of 3-folds".
- (51) Conference in Honor of Joseph Lipman, May 17-21, 2004 at Purdue University, "Toroidalization of morphisms"
- (52) Special Session on Commutative Algebra and Algebraic Geometry, AMS meeting, Lawrenceville, NJ, April 17-18, 2004, "Asymptotic Behavior of the Length of Local Cohomology".
- (53) Colloquium Talk: Rutgers University, April 16, 2004, "Monomialization and Toroidalization of Morphisms of 3-folds".
- (54) Special Session on Syzygies and Hilbert Functions, AMS meeting, Tallahassee, Florida, March 12-13, 2004, "Poincare Series of Surface Singularities".

- (55) Joint India-AMS mathematical meeting, Bangalore, December 18, 2003, Special Session in Commutative Algebra, “Monomialization of Birational Morphisms of 3-folds”.
- (56) Joint Meeting of the Spanish and American Mathematical Societies, Seville, June 21, 2003, Special Session in Commutative Algebra, “Poincaré Series of Resolutions of Surface Singularities”.
- (57) *Algebre Commutative et Geometrie Algebrique*, CIRM, Marseille-Luminy, June 3, 2003, “Poincaré Series of Singularities”.
- (58) Bach2 Conference, University of Kentucky, April 12, 2003, “Ramification of Valuations”.
- (59) Algebra Seminar, Texas A and M University, February 21, 2003, “Monomialization of Mappings”.
- (60) MSRI Workshop on “Commutative Algebra: Local and Birational Theory”, MSRI, Berkeley, California, December 2, 2002, “Ramification and Resolution in Transcendental Extensions”, video and notes from lecture online at www.msri.org/publications/ln/msri/2002/birational/cutkosky/1/index.html.
- (61) Nato/Otan Advanced Research Workshop on “Commutative Algebra, Singularities and Computer Algebra”, Sinaia Romania, September 19, 2002, “Ramification of Valuations”.
- (62) Talk in Oberseminar, University of Essen, Germany, June 25, 2002, “Poincaré Series of Resolutions of Surface Singularities”.
- (63) Conference on “Current Trends in Commutative Algebra”, Levico Italy, June 17 - June 21, 2002, “Ramification of Valuations”.
- (64) Conference at University of Tennessee, April 25 - 27, 2002, “Simultaneous Resolution of Singularities”.
- (65) Colloquiumfest, University of Saskatchewan, Saskatoon, Canada, March 24, 2002, “Ramification of Valuations”.
- (66) AMS meeting, Ann -Arbor, Michigan, Special Session in Commutative Algebra, March 1- 3, 2002, “Ramification of Valuations”.
- (67) Commutative Algebra Days, Nebraska, March 16, “Ramification of Valuations”.
- (68) Mathematical Sciences Institute, Madras, India, December 17, 2001, “A Counterexample to global simultaneous resolution”.
- (69) International Conference on Algebra and Geometry, University of Hyderabad, Hyderabad, India, December 7 - 12, 2001, “Simultaneous Resolution”.
- (70) Colloquium Talk, Washington University, St. Louis, Nov. 27, 2001, “Resolution of mappings”.
- (71) Colloquium Talk, University of Kentucky, Lexington, Nov. 20, 2001, “Resolution of mappings”.
- (72) Colloquium Talk, University of Kansas, Lawrence, Nov. 1, 2001, “Finite mappings and ramification of valuations”.
- (73) AMS-SMF Meeting, Lyon, France, Special Session on Commutative Algebra, July 17, 2001, “Hilbert Functions of Ideal Sheaves”.
- (74) Commutative Algebra, Interactions with Algebraic Geometry, Institut Fourier, Grenoble, July 14, 2001, “Generically finite morphisms and Ramification of Valuations”.

- (75) Algebra Seminar, University of Messina, Sicily, “Ramification of Valuations I” (June 26) and “Ramification of Valuations II” (June 28).
- (76) Algebra Seminar, University of Messina, Sicily, “Asymptotic Regularity I” (June 19) and “Asymptotic Regularity II” (June 21).
- (77) Conference on Singularities of Algebraic Varieties and Desingularization, University of Versailles, France June 13, 2001, “Ramification of Valuations”.
- (78) Commutative Ring Theory and Applications, June 10, 2001, Fez, Morocco, “Ramification Theory of Valuations”.
- (79) Seminaire sur les Singularites, University of Paris VII, June 7, 2001 “Ramification of Valuations”.
- (80) AMS Meeting, Invited Address, Lawrence, Kansas, March 31, 2001, “Monomialization of Morphisms”.
- (81) AMS Meeting, Special Session in Algebraic Geometry, Lawrence, Kansas, March 30, 2001, “Vanishing of Differentials along Ideals”.
- (82) CMS Meeting, Symposia in Algebraic Geometry, Vancouver, December 10, 2000, “Monomialization of morphisms”.
- (83) Algebraic Geometry Seminar, University of Toronto, September 25, 2000, “Monomialization of Morphisms”.
- (84) AMS Meeting, Special Session in Commutative Algebra and Algebraic Geometry, Toronto, September 24, 2000, “Monomialization of Morphisms”.
- (85) Algebra Conference at University of Kansas, September 2, 2000, “Monomialization of Morphisms”.
- (86) Conference in honor of Abhyankar’s 70th Birthday, Purdue University, July 22, 2000, “Monomialization of Morphisms”.
- (87) University of Valladolid, Spain, July 17, 2000, “Asymptotic Regularity”.
- (88) University of Valladolid, Spain, July 4 and July 11, 2000, 2 talks on “Monomialization of Morphisms”.
- (89) Algebre Commutative et Geometrie Algebrique, CIRM, Marseille - Luminy, June 9, 2000, “Monomialization of Morphisms”.
- (90) Conference at University of Nebraska, May 29, 2000, “Monomialization of Morphisms”.
- (91) AMS Meeting, Special Session in Commutative Algebra and Algebraic Geometry, Lowell Massachusetts, March 30, 2000, “Asymptotic regularity and Seshadri constants”.
- (92) Number Theory Seminar, Boston University, March 13, 2000, “Algebraic Fundamental Groups of Curve Singularities”.
- (93) Algebraic Geometry Seminar, Harvard University, February 22, 2000, “Monomialization of Morphisms”.
- (94) Algebra Seminar, Northeastern University, February 7, 2000, “Asymptotic Regularity and Seshadri Constants”.
- (95) Workshop on Invariant Theory, University of Pune, Pune, India, Dec 26-27, 1999, Course of 3 Lectures on “An Introduction to Resolution of Singularities”.
- (96) Colloquium talk, Institute of Mathematical Sciences, Madras, India, Dec. 20, 1999, “Asymptotic regularity and Seshadri constants”.

- (97) Colloquium talk, Mehta Research Institute of Mathematics and Mathematical Physics, Allahabad, India, Dec. 14, 1999, “Monomialization of Morphisms”.
- (98) Colloquium talk, Indian Institute of Science, Bangalore, India, Dec. 7, 1999, “Asymptotic regularity and Seshadri constants”.
- (99) Conference on Commutative Algebra, Tokyo, Japan, Nov. 23-26, 1999, 2 hour long talks. “Monomialization of morphisms” and “Asymptotic regularity”.
- (100) Algebraic Geometry Seminar, University of Tokyo, Japan, Nov. 22, 1999, “Monomialization of morphisms”.
- (101) Course of 15 90 minute talks on resolution of singularities and mappings, Chennai Mathematical Institute, Madras, India, Oct. 18 - Dec. 20, 1999.
- (102) Special Session in Commutative Algebra, AMS meeting, Salt Lake City, Sept. 25 - 26, 1999, “Monomialization of Projective Morphisms”.
- (103) Kommutative Algebra and Algebraische Geometrie, Oberwolfach, Germany, August 8 - 14, 1999, “Local monomialization of morphisms” (1 hour talk).
- (104) International Conference on Valuation Theory, Saskatoon, Canada, July 24- August 4, 1999, “Local monomialization of morphisms” (1 hour plenary talk).
- (105) Seminar talk, Univ. Reggio Calabria, June 20, 1999, “Asymptotic Regularity”.
- (106) Conference on Commutative Algebra and Algebraic Geometry, Univ. Messina, Sicily, Italy, June 16 - 19, 1999, “Monomialization of Morphisms” (1 hour plenary talk).
- (107) Colloquium talk, Univ. Kansas, Spring 1999, “Factorization and monomialization of morphisms”.
- (108) Special Session in Commutative Algebra, AMS meeting, Urbana, Illinois, March 18-21, 1999, “Local factorization of birational mappings”.
- (109) Special Session in Commutative Algebra and Algebraic Geometry, AMS meeting, San Antonio, January 15 - 16, 1999, “Asymptotic Behaviour of Regularity”.
- (110) Special Session in Singularities in Algebraic and Analytic Geometry, AMS meeting, San Antonio, January 13 - 15, 1999, “Monomialization and Factorization of Mappings”.
- (111) Colloquium Talk, Michigan State University, November 12, 1998, “Local factorization and monomialization of morphisms”.
- (112) Algebraic Geometry Seminar, Johns Hopkins University, September 29 and 30, 1998, “Local factorization and monomialization of morphisms”.
- (113) Special Session on Commutative Algebra, AMS meeting, Chicago, September 12-13, 1998, “Simultaneous resolution of singularities”.
- (114) Colloquium Talk, Indian Institute of Technology, Bombay, India, July 20, 1998 “Cohen-Macaulay coordinate rings of blowup schemes”.
- (115) Colloquium Talk, SPIC Science Foundation, Madras, India, July 13, 1998, “Local factorization and monomialization of morphisms”.

- (116) Colloquium Talk, Tata Institute of Fundamental Research, Bombay, India, June 23, 1998, "Local factorization and monomialization of morphisms".
- (117) Conference on Homological Methods, Genoa, Italy, June 9, 1998, "Simultaneous resolution of singularities".
- (118) University of Nebraska Centennial Celebration, May 16, 1998, "Factorization and monomialization of morphisms".
- (119) Special Session on Commutative Algebra, AMS meeting, Louisville, March 21, 1998, "Local factorization and monomialization of Morphisms".
- (120) Special Session on Commutative Algebra, AMS meeting, January, 1998, "Local factorization and monomialization of Morphisms".
- (121) Colloquium talk, University of Versailles (France), December 18, 1997, "Factorization of birational morphisms".
- (122) Colloquium talk, University of Versailles (France), December 11, 1997, "The Riemann-Roch problem".
- (123) Special Session on Commutative Algebra, AMS meeting, Montreal, Canada, Sept 26-27 1997, "Monomialization and factorization of generically finite morphisms".
- (124) Colloquium Talk, Universität Regensburg (Germany), July 11, 1997, "Monomialization and factorization of generically finite morphisms".
- (125) Algebre Commutative et Geometrie Algebrique, CIRM, Marseille - Luminy, May 5-9 1997, "Local factorization of n-dimensional birational maps".
- (126) Missouri Algebraic Geometry Conference, Columbia, April 15, 1997, "Local factorization of n-dimensional birational maps".
- (127) Route 81 Conference, Syracuse, New York, Oct 26-27, 1996, Cohen Macaulay coordinate rings of blowup schemes".
- (128) Special Session on Commutative Algebra, AMS meeting, Seattle, Washington, August 1996, "Local factorization of birational maps".
- (129) Algebraic Geometry Seminar, Washington University, July 1996 (4 hours), "Local factorization of birational maps".
- (130) Seminar Talk, Universität Essen (Germany), May 1996, "Nagata's conjecture".
- (131) Kommutative Algebra and Algebraische Geometrie, Oberwolfach, Germany, May 5 - 11, 1996, "Local factorization of birational maps" (1 hour talk).
- (132) Special Session on Commutative Algebra and Algebraic Geometry, AMS meeting, Orlando, Fl, Jan 1996, "Local Factorization of birational morphisms".
- (133) Algebraic Geometry Seminars, Purdue University, 3 talks, Nov. 28 - 29, 1995, "Local Factorization of birational maps".
- (134) Colloquium Talk: Purdue University, Nov. 28, 1995, "Local Factorization of birational maps".
- (135) Colloquium Talk: Institute of Mathematical Sciences, Madras, July 1995, "Symbolic Algebras of Monomial Curves".
- (136) Seminar Talk, Universität Bochum (Germany), June 1995, "The Riemann Roch Problem".

- (137) Über Seminar, Universität Essen (Germany), June, 1995, "Symbolic Algebras of Monomial Curves".
- (138) A Short Course on Complete Ideals, Universität Essen (Germany), June 1995.
- (139) Special Session on Homological Aspects of Commutative Ring Theory, AMS meeting, Kent, Ohio, Nov. 1995, "Local Factorization of Birational morphisms".
- (140) Computational Aspects of Commutative Algebra and Algebraic Geometry, Oberwolfach, Germany, May 21 - May 27, 1995 (Hour Talk), "Local Factorization of Birational morphisms".
- (141) Special Session on Commutative Algebra, AMS Meeting, Orlando, FL, March 1995, "Local Factorization of Birational morphisms".
- (142) Special Session on Rees Algebras and Related Topics, AMS Meeting, San Francisco, CA, Jan 1995, "Symbolic Algebras of Monomial curves".
- (143) Special Session on Algebraic Geometry, AMS Meeting, Norman, Oklahoma, October 1994, "Symbolic Algebras of Monomial curves".
- (144) Colloquium Talk: University of Missouri -St.Louis (UMSL), September 13, 1994, "Purity of the branch locus and Lefschetz Theorems".
- (145) Commutative Algebra: A satellite conference to The International congress of Mathematicians; Vechta, Germany, August 12-19, 1994, "Purity of the branch locus and Lefschetz Theorems".
- (146) Colloquium Talk: Institute of Mathematical Sciences, Madras, July 1994, "The Riemann Roch Problem".
- (147) Colloquium Talk: Indian Institute of Technology, Madras, July 1994, "Purity of the branch locus and Lefschetz Theorems".
- (148) Colloquium Talk: Ramanujan Institute for Advanced Study in Pure Mathematics, Madras, India, July 1994, "An intrinsic criterion for isomorphism of singularities".
- (149) A Short Course on "Linear Systems and Riemann-Roch" SPIC Science Foundation, Madras, India, June-July 1994.
- (150) Colloquium Lecture: SPIC Science Foundation, Madras, India, June 1994, "Symbolic Algebras of Monomial Curves".
- (151) Seminar Talk: Johns Hopkins University, March 1994, "The Riemann Roch Problem".
- (152) Seminar Talk: Rutgers University, November 1993, "Purity of the branch locus and Lefschetz Theorems".
- (153) Seminar Talk: Northeastern University, October 1993, "Purity of the branch locus and Lefschetz Theorems".
- (154) Algebraic Geometry Seminar: Harvard University, October 1993, "The Riemann Roch Problem".
- (155) Special Session in Theory of Rings and Modules, AMS Meeting, Salt Lake City, Utah, April 1993, "Purity of the branch locus and Lefschetz Theorems".
- (156) Colloquium Talk: University of Kansas, October 1992, "Purity of the branch locus and Lefschetz Theorems".
- (157) AMS-IMS-SIAM Joint Summer Research conference, Commutative Algebra: Syzygies, Multiplicities and Birational Algebra, Mt.Holyoke,

- July 4-9, 1992, The Birational Algebra Seminar (half-hour talk) “Purity of the branch locus and Lefschetz Theorems”.
- (158) AMS-IMS-SIAM Joint Summer Research conference, Commutative Algebra: Syzygies, Multiplicities and Birational Algebra, Mt.Holyoke, July 4-9, 1992: (hour talk), “Complete Ideals”.
- (159) Special Session in Commutative Algebra, AMS meeting, Springfield, Missouri, March 1992, “An intrinsic criterion for isomorphism of singularities”.
- (160) Special Session in Commutative Algebra, AMS meeting, Fargo, ND, October 1991, “The Riemann Roch Problem”.
- (161) Colloquium Talk: University of Kansas, September 1991, “The Riemann Roch Problem”.
- (162) Special Session in Commutative Algebra, AMS Orono Mathfest, Maine, August 1991, “The Riemann Roch Problem”.
- (163) Mid West-Great Plains Workshop in Commutative Algebra, Columbia, Missouri, June 1991, “On unique and almost unique factorization of complete ideals”.
- (164) Colloquium Talk: Institute of Mathematical Sciences, Madras, India, March 1991, “On unique and almost unique factorization of complete ideals”.
- (165) Colloquium Talk: SPIC Science Foundation, Madras, India, March 1991, “An intrinsic criterion for isomorphism of singularities”.
- (166) Colloquium Talk: Tata Institute of Fundamental Research, India, February 1991, “An intrinsic criterion for isomorphism of singularities”.
- (167) Colloquium Talk: Washington University, St.Louis, December 1990, “An intrinsic criterion for isomorphism of singularities”.
- (168) Special Session in Algebraic Geometry, AMS meeting in Louisville, Kentucky, January 1990, “An intrinsic Criterion for isomorphism of singularities”.
- (169) Seminar Talk: Purdue University, May 1989, “An intrinsic criterion for isomorphism of singularities”.
- (170) Seminar Talk: Purdue University, November 1988, “On Fano 3 folds”.
- (171) Seminar Talk: University of Utah, April 1988, “Unique and semi-unique factorization of complete ideals”.
- (172) Seminar Talk: Michigan State University, April 1988, “Unique and semi-unique factorization of complete ideals”.
- (173) Special session in Commutative Algebra, American Mathematical Society (AMS) meeting, Knoxville, Tennessee, March 1988, “Unique and semi-unique factorization of complete ideals”.
- (174) Colloquium Talk: Louisiana State University, March 1988, “Unique and semi-unique factorization of complete ideals”.
- (175) Colloquium Talk: Oklahoma State University, March 1988, “Unique and semi-unique factorization of complete ideals”.
- (176) Seminar Talk: Purdue University, February 1988, “Unique and semi-unique factorization of complete ideals”.
- (177) Colloquium Talk: University of Missouri, February 1988, “Unique and semi-unique factorization of complete ideals”.

- (178) Colloquium Talk: University of Notre Dame February 1988, “Unique and semi-unique factorization of complete ideals”.
- (179) Seminar Talk: University of Pennsylvania, February 1988, “Unique and semi-unique factorization of complete ideals”.
- (180) Algebraic Geometry Seminar, Columbia University, 1987, “On unique and almost unique factorization of complete ideals”.
- (181) Three Folds Conference, Columbia University, 1987, “Finite Generation of Symbolic Algebras”.
- (182) Colloquium Talk: Setton Hall University, NJ, 1987, “Complete Ideals”.
- (183) Seminar Talk: Michigan State University, January 1987, “Symbolic Algebras”.
- (184) Algebraic Geometry Seminar: Columbia University, New York, October 1986, “Counterexamples to a Conjecture of Fujita”.
- (185) Algebraic Geometry Seminar: Columbia University, New York, April 1985, “Zariski Decomposition”.
- (186) Colloquium Talk: Suffolk University, Boston, Mass. April 1985, “Zariski Decomposition”.
- (187) Colloquium Talk: Wellesley College, Wellesley, Ma., March 1985, “Zariski Decomposition”.
- (188) Colloquium Talk: University of Notre Dame, Indiana, March 1985, “Zariski Decomposition”.