

CURRICULUM VITAE

Vasile Brinzanescu

Born: 11.10.1945, Desa, Dolj, Romania

a) Master Math., University of Bucharest, 1968; Ph.D. Math., University of Bucharest, 1978.

b) Research Fellow, Institute of Mathematics of Romanian Academy 1968-1975 and Institute of Automatics 1975-1976;

Assistant 1976-1978, Assistant Professor 1978-1990, Associate Professor 1990- 1992, Technical University Bucharest;

Senior Researcher II 1992-1993, Senior Researcher I 1993-present, Institute of Mathematics Simion Stoilow of Romanian Academy;

Deputy Director 1994-2004, Director 2004-2012, Institute of Mathematics Simion Stoilow of Romanian Academy.

c) Published (up until 2017):

61 research papers and one research monograph;
3 books for students and 6 exercise books for students.

d) Awards:

Simion Stoilow Prize of the Romanian Academy 1985;

Prize for excellence in research of the Romanian Society of Mathematicians 1996;

Teaching Award of the Ministry of Education 1986;

Doctor Honoris Causa of the Ovidius University Constanta in 2007;

Excellence Diploma for year 2012 of the Romanian Society of Mathematical Sciences.

e) Grants:

Humboldt Fellowship of Alexander von Humboldt Foundation, Germany:

Muenchen University (Prof. Dr. O. Forster), September 1990-December 1991;

Max-Planck Institut fuer Mathematik Bonn (Prof. Dr. F. Hirzebruch), February-July 1994;

Kaiserslautern University (Prof. Dr. G. Trautmann), January-February 1999.

Several national research grants obtained by competition.

f) Conferences:

Invited speaker at more than 25 international conferences;
co-organized 10 international conferences in Algebraic Geometry, Commutative Algebra and Topology;

co-organized 3 international Congresses of Romanian Mathematicians, Pitesti 2003, Bucharest 2007, Brasov 2011.

g) Visiting Professor:

Gottingen University, SFB 170 Geometrie und Analysis, October-December 1992;

Max Planck Institut fuer Mathematik Bonn, June 1991, February-July 1994, January-June 1996, February-October 2002, August-September 2003, August- September 2007, August-September 2008, July-August 2010; July-August 2012; January-February 2014, March 2016;

Muenchen University, September 1990-December 1991.

ICTP Trieste, August 1994, March-May 1995, June-August 1997, July-September 1999, May-June 2011;

IHES, Bures-sur-Yvette, February-April 1998;

Edinburgh University, March 1999;

Kaiserslautern University, January-February 1999, June 2001, May-July 2005;

Universite de Montreal, CRM, May 2002, May 2004;

Ecole Polytechnique Federale de Lausanne, April 2003, April 2004, May 2006, November 2008;

Bayreuth University, February 2004;

MIT Boston, June 2006;

Ohio State University, Columbus, June 2006;

Genova University, December 2006; June 2014;
Mittag-Leffler Institute, Stockholm, February 2007;
Universite Paris 6, May 2008.
University of Pensilvania, Philadelphia, September-December 2012
Fields Institute, University of Toronto, August 2016.

h) Invited speaker to prestige universities:

Muenchen 1990, 1991; Konstanz 1991; Warsaw 1991; Bologna 1991, 1997, 2011; Ferrara 1991; Goettingen 1992, 2007; Koeln 1994; Paris, Ecole Polytechnique 1996; Bochum 1996; Frankfurt 1996; Edinburgh 1999; Montreal, McGill 2002; Bayreuth 2002, 2004; Bonn 2002, 2009; Max Planck Inst. Math. Bonn 1991, 1994, 1996, 2002, 2008; 2016; Berlin 1974, 1984, 1998, 2002, 2005; Essen 2002; Marburg 2002; Oberwolfach 2004; Ohio State 2006, 2012; Genova 2006, 2010; 2014; Mittag-Leffler Inst. 2007; Turku 2009; Nice 2010; Univ. of Penn. 2012; EPFL 2006, 2008; Florence 2011; SNS Pisa 2006; Tor Vergata Roma 2008; Univ. Illinois Chicago 2012; Genova 2014; Pohang (Korea) 2013, 2015; Toronto 2016.

i) Ph. D. students:

M. Aprodu 1996; N. Rabanca 1999; R. Slobodeanu 2006; N. Dinuta 2007; O. A. Turcu 2008; A. D. Halanay 2009; R. Dinuta 2010; M. Marchitan 2011; A. Sterian 2012.

j) Editor:

Editor-in-chief: Mathematical Reports and Revue Roumaine de Mathematiques Pures et Appliquees, 2012-2017;

Editor: Proc. of Romanian Academy, An. Univ. Ovidius Constanta, Buletin SSMR, Bulletin UPB, Serdica Math. J.;

Editor of 3 volumes of Proc. of Romanian Congresses of Math.;

Editor of several volumes dedicated to mathematicians.

Scientific Publications

Vasile Brinzanescu

1. *Caracterizarea imersiilor unei scheme în $Proj(S)$* , St. Cerc. Mat., tom 22, nr. 8, p.1155–1158, (1970); MR-5010, vol. 49:3.
2. *Sur un lemme de calcul formel*, Rev. Roum. Math. Pures Appl., Tome 16, Nr. 7, p.1047–1050, (1971); MR-6826, vol. 45:5.
3. *Asupra scufundărilor Veronese*, St. Cerc. Mat., tom 26, nr. 5, p.625–629, (1974); MR-5558, vol. 56.
4. *Asupra coomologiei spatiului proiectiv*, St. Cerc. Mat., tom 27, nr. 4, p.387–392, (1975); (joint with M. Stoia); MR-2969, vol. 53:2.
5. *Sur le polynome de Hilbert-Samuel d'un morphisme d'espaces complexes*, C. R. Acad. Sci. Paris, t. 282 A, p.215–217, (1976); (joint with C. Bănică); MR-5929, vol. 53:3.
6. *Hilbert-Samuel polynomials of a complex of modules*, Comm. in Alg. 5 (7), p.733–742, (1977); (joint with C. Bănică); MR-10448, vol. 55:10.
7. *Hilbert-Samuel polynomials of a proper morphism*, Math. Z., 158, p.107–124, (1978); (joint with C. Bănică); MR-11.497, vol. 58.
8. *The Hilbert-Samuel polynomials of a proper morphism*, Proc. Romanian-Finnish Seminar on Complex Analysis, Bucharest 1976, Lect. Notes Math. 743, p.399–401, Springer 1979; MR. 81f:32014.
9. *Fibrare vectoriale pe varietăți algebrice-Polinoame Hilbert-Samuel relativ la morfisme proprii*, St. Cerc. Mat., tom 32, nr. 1, p.3–42, (1980); MR. 81m:14012.
10. *Topologically trivial algebraic 2-vector bundles on ruled surfaces I*, Rev. Roum. Math. Pures Appl., 29, 8, p.661–673, (1984); (joint with M. Stoia); MR. 86g:14007a.
11. *Topologically trivial algebraic 2-vector bundles on ruled surfaces II*, Proc. Conf. Alg. Geom. Bucharest 1982, Lect. Notes Math. 1056, p.34–46, Springer 1984; (joint with M. Stoia); MR. 86g:14007b.
12. *Holomorphic 2-vector bundles on nonalgebraic 2-tori*, J. reine angew.

- Math., 363, p.47–58, (1985); (joint with P. Flondor); MR. 87h:32055.
13. *Quadratic intersection form and 2-vector bundles on nonalgebraic surfaces*, Proc. Conf. Alg. Geom. Berlin 1985, Teubner, Band 92, 1986; (joint with P. Flondor); MR. 89d:32061.
 14. *Simple filtrable 2-vector bundles on complex surfaces without divisors*, Rev. Roum. Math. Pures Appl., 31, No. 5, p.507–512, (1986); (joint with P. Flondor); MR. 88b:32065.
 15. *Focal conics in A-type smectic liquid crystals*, Rev. Roum. Physics, 31, No. 5, p.517–522, (1986); (joint with S. Frunzã et al.; 4 authors).
 16. *Invariant differential systems and local controlability*, Proc. Intern. Conf. on Automatic Systems, Bucharest 1987; (joint with P. Flondor et al.; 3 authors).
 17. *Fibrati vectoriali pe suprafete nealgebrice*, Vol. Analizã Complexa, Edit. St. Encicl., Bucuresti 1988; (joint with P. Flondor); 32 p.
 18. *Algebraic 2-vector bundles on ruled surfaces*, Ann. Univ. Ferrara - Sez. VII - Sc. Mat., vol. XXXVII, p.55–64, (1991); MR. 94a:14014.
 19. *Lagrange polynomials in the Riemann-Roch formalism*, Rev. Roum. Math. Pures Appl., 37, (8), p.369–370, (1992); MR. 93h:14006.
 20. *Neron-Severi group for nonalgebraic elliptic surfaces I; Elliptic bundle case*, Manuscripta Math., 79, p.187–195, (1993); MR. 94g:32036.
 21. *The Picard group of a primary Kodaira surface*, Math. Ann., 296, p.725–738, (1993); MR. 94f:32056.
 22. *A simple proof of a Bogomolov type inequality in the case of nonalgebraic surfaces*, Rev. Roum. Math. Pures Appl., 38, No. 7-8, p.631–633, (1993); MR. 95a:32052.
 23. *Neron-Severi group for nonalgebraic surfaces II; nonkählerian case*, Manuscripta Math., 84, p.415–420, (1994); MR. 95j:32043.
 24. *Torsion of the Neron-Severi group for primary Kodaira surfaces*, Rev. Roum. Math. Pures Appl., 39, No. 10, p.927–931, (1994); MR. 97f:14033.
 25. *Holomorphic vector bundles over compact complex surfaces*, Lect. Notes Math. 1624, Springer 1996; 180 p. (**research monograph**). MR. 98g:32053.
 26. *Neron-Severi group for torus quasi-bundles over curves*, In: Moduli of Vector Bundles, Proc. Taniguchi Symp., Japan 1994, Lect. Notes pure appl. Math., vol. 179, Marcel Dekker, Inc., 1996, p.11–32; (joint with K. Ueno); MR. 97f:32039.
 27. *Fibrés vectoriels de rang 2 sur les surfaces réglées*, C. R. Acad. Sci. Paris, t.323, Série I, p.627–630, (1996); (joint with M. Aprodu); MR. 97e:14056.

28. *Stable rank-2 vector bundles over ruled surfaces*, C. R. Acad. Sci. Paris, t. 325, Série I, p.295–300, (1997); (joint with M. Aprodu); MR. 98j:14009.
29. *Numerical invariants and stability of 2-vector bundles over ruled surfaces*, Ann. St. Univ. Ovidius Constanta, vol. 5 (2), p.9–16, (1997); (joint with M. Aprodu); MR. 99b:14042.
30. *Holomorphic structures in vector bundles over complex surfaces*, Proc. Intern. Conf. Geom. Sibiu 1997, General Mathematics, vol.5, 43–52, (1997); MR. 2000h:14036;
31. *Existence of stable 2-vector bundles over ruled surfaces*, Rev. Roum. Math. Pures Appl., 43, No. 1-2, (1998), 47–56; (joint with M. Aprodu); MR. 99k:14067;
32. *Neron-Severi group for nonalgebraic surfaces III*, Rev. Roum. Math. Pures Appl., 43, No. 1-2, (1998), 89–95; MR. 99m:32035;
33. *Moduli spaces of vector bundles over ruled surfaces*, Nagoya Math. J. 154, (1999), 111–122; (joint with M. Aprodu); MR. 2000c:14059;
34. *A class of harmonic submersions and minimal submanifolds*, International J. Math. Vol. 11, No. 9 (2000), 1177-1191; (joint with M. A. Aprodu and M. Aprodu); MR. 2001j:53084;
35. *Flat 2-vector bundles over compact complex manifolds*, Math. Reports, 3 (53) (2001), 2, 151–157 (joint with M. Marchitan and R. Slobodeanu); MR. 2002m:32030;
36. *Double covers and vector bundles*; An. Stiint. Univ. Ovidius Constanta, Ser. Mat. **9** (2001), no.1, 21-26; MR. 2003m:32014;
37. *Pseudo-harmonic morphisms; applications and examples*; Ann. Univ. Timisoara Vol. XXXIX (2001), 111-121; MR. 2070573;
38. *Holomorphic vector bundles on primary Kodaira surfaces*, Math.Z. 242 (2002) no. 1, 63–73 (joint with M. Aprodu and M. Toma); MR. 2004h:32021
39. *On the holomorphic rank-2 vector bundles with trivial discriminant over non-kähler elliptic bundles*; (joint with M. Aprodu) J. Math. Kyoto Univ. 42 (2002), no. 4, 617-623 (2003); MR. 2004c:32044;
40. *Twisted Fourier-Mukai transforms on some elliptic surfaces*; (joint with R. Moraru); Proc. Workshop Oberwolfach 2004, *Surfaces of general type*, Oberwolfach Reports, vol.I (2004),448-451;
41. *Stable bundles on non-Kähler elliptic surfaces*; (joint with R. Moraru), Comm. Math. Phys. 254, no.3 (2005), 565-580;
42. *Holomorphic rank-2 vector bundles over non-Kähler elliptic surfaces*; (joint with R. Moraru); Ann. Inst. Fourier, vol.55, no.5, (2005), 1659-1683;

43. *Twisted Fourier-Mukai transforms and bundles on non-Kähler elliptic surfaces*; (joint with R. Moraru); Math. Res. Letters, vol.13, no.4 (2006), 501-514;
44. *Holomorphicity and Walczak formula on Sasakian manifolds*; (joint with R. Slobodeanu); J. Geom. Phys., 57 (2006), 193-207;
45. *Finite covers and applications to moduli spaces of vector bundles*, Modern trends in geometry and topology, 113-120, Cluj Univ. Press, Cluj-Napoca, 2006.
46. *Poisson manifolds and completely integrable hamiltonian systems*, in: Proc. of the Second Workshop Series on Appl. Math., Bull. St. Univ. Pitesti 14 (2008), 69-76.
47. *Beilinson spectral sequences on rational scrolls*, (joint with M. Aprodu) in: Moduli spaces and vector bundles, ed. L. Brambila-Paz, S. Bradlow, O. Garcia-Prada and S. Ramanan, London Mathematical Society Lecture Note Series: 359, 426-436, Cambridge University Press 2009.
48. *A class of integrable flows on the space of symmetric matrices*, (joint with A. Bloch, A. Iserles, J. Marsden, T. Ratiu), Commun. Math. Phys. 290 (2009), 399-435 .
49. *Generalized complex structures on complex 2-tori*, (joint with N. Dinuta, R. Dinuta), Bull. Math. Soc. Sci. Math. Roumanie, tome 52(100), No. 3 (2009), 263-270.
50. *Generalized complex structures on Kodaira surfaces*, (joint with O.-A. Turcu), J. Geom. Phys. 60 (2010), 60-67.
51. *The equations of generalized complex structures on Kodaira surfaces*, (joint with L. Brinzanescu, N. Dinuta), An. Univ. Vest Timis. Ser. Mat.-Inform. 48 (2010), no. 1-2, 35-44.
52. *From string theory to algebraic geometry and back*, "Alexandru Myller" Mathematical Seminar, 26-34, AIP Conf. Proc., 1329, Amer. Inst. Phys., Melville, NY, 2011.
53. *Rank-two vector bundles on Hirzebruch surfaces*, (joint with M. Aprodu, M. Marchitan), Cent. Eur. J. Math. 10 (2012), no. 4, 1321-1330.
54. *Vector bundles on non-Kähler elliptic principal bundles*, (joint with A. Halanay, G. Trautmann), Ann. Inst. Fourier, vol. 63, no. 3, (2013), 1033-1054.
55. *Hodge invariants of higher-dimensional analogues of Kodaira surfaces*, in: Bridging Algebra, Geometry and Topology, Springer Proceedings in Mathematics & Statistics, Volume 96, 2014, 95-106, Ibadula Denis, Veys Willem

(Eds).

56. *On the relationship between D'Angelo q -type and Catlin q -type*, (joint with A. C. Nicoara), *J. Geom. Anal.*, 25 (2015), no. 3, 1701-1719; DOI 10.1007/s12220-014-9490-5, published online: 26 April 2014.

57. *Algebraic complete integrability of the Bloch-Iserles system*, (joint with T. S. Ratiu), *Intern. Math. Res. Notices*, IMRN 2015, no.14, 5806-5817 DOI 10.1093/imrn/rnu111, published online: July 3, 2014.

58. *Irreducible vector bundles on some elliptic non-Kähler threefolds*, (joint with V. Vuletescu), *J. Geom. Phys.* 91(2015), 141-145;

59. *Algebraic methods for vector bundles on non-Kähler elliptic fibrations*, *Ann. Univ. Ferrara*, Vol. 63, Issue 1, (2017), 33-50;

60. *em Relating Catlin and D'Angelo q -types*, (joint with A. Nicoara), arXiv: 1707.08294v1/ July 2017.