

Bogdan Suceavă

E-mail: bsuceava@fullerton.edu

EDUCATION

- **Ph.D. in Mathematics**, Michigan State University :
Ph.D. Thesis Advisor: Prof. Bang-Yen Chen
Thesis: *New Riemannian and Kaehlerian curvature invariants and strongly minimal submanifolds*. Defended on April 25, 2002. Degree awarded: 05/2002.
- **Master in Geometry**, University of Bucharest (06/1995):
Master Thesis Advisors: Prof. Liviu Nicolescu and Prof. Ion Mihai
Title of Master Thesis: *Slant Immersions. Applications to the Study of Riemannian Submersions*.
- **B. Sc. in Mathematics**, University of Bucharest (06/1994):
Undergraduate Thesis Advisor: Prof. Liviu Nicolescu
Title of Undergraduate Project: *Connections and Semi-Connections on Lie Groups*.

Publications in Mathematics:

Publications in Differential Geometry

- [1] *Fundamental inequalities and strongly minimal submanifolds*, Contemporary Mathematics: Recent Advances in Riemannian and Lorentzian Geometries, Editors: R. S. Sharma and K. L. Duggal, American Mathematical Society, (2003) vol. **337**, 155-170.
- [2] *The spread of the shape operator as conformal invariant*. JIPAM. J. Inequal. Pure Appl. Math. **4** (2003), no. 4, Article 74, 8 pp. (electronic).
- [3] *New Riemannian and Kaehlerian curvature invariants and strongly minimal complex surfaces* (Ph.D. thesis), Michigan State University, 2002.
- [4] *A Myers type theorem for almost Hermitian manifolds*, Algebra, Geometry and Their Applications, 2 (2002), pp.13-17.
- [5] *The Chen invariants of warped products of hyperbolic planes and their applications to immersibility problems*, Tsukuba J. Math., Vol.24 (2001), No.2, pp.311-320.
- [6] *Remarks on B.Y.Chen's inequality involving classical invariants*, Anal. Sti.Univ. Al.I.Cuza Iasi tom XLV, s.I.a, Matematica, 1999, f.2., pp.405-412.
- [7] *A Natural model for gluing two tori and special surface of genus two*, Politehn. Univ. Bucharest Sci. Bull. Ser. A Appl. Math. Phys. 59 (1997), no. 1-4, 49-52.
- [8] *Some theorems on austere submanifolds*, First Conference of Balkan Society of Geometers (Bucharest, 1996). Balkan J. Geom. Appl. 2 (1997), no. 1, 109-115.
- [9] *Reduced and extended Kaehler geodesic structure of a curve on a submanifolds of an almost Hermitian manifold*, Politehn. Univ. Bucharest Sci. Bull. Ser. A Appl. Math. Phys. 60 (1998), no. 1-2, pp. 3-5.
- [10] *Les r-courbures moyennes des hypersurfaces*, Bull. Math. Soc. Sci. Math. Roumanie (N.S.) 36(84) (1992), no. 2, 175-177.

Publications in Advanced Euclidean Geometry

- [1] *Applications of homogeneous polynomials in Euclidean geometry*, (joint work with W. G. Boskoff), *Forum Geometricorum* **5** (2005), 143-148.
- [2] *When is Euler's Line Parallel to a Side of a Triangle?* (joint work with W. G. Boskoff), *College Math. J.*, **35** (2004), 292-296.
- [3] *About a Competition Problem*, *Gazeta Matematică*, 8(1991), 317;
- [4] *The equivalence of certain properties in the geometry of triangle*, (in Romanian) *Gazeta Matematică*, 3(1990), 93-98;
- [5] *Use of homogeneous functions in the proof of some geometric inequalities or identities*, (in Romanian), *Gazeta Matematică*, 8-9(1990), 236-240.

Publications in Algebra

- [1] *A Class of Applications of AM-GM Inequality (From a 2004 Putnam Competition Problem to Lalescu's Sequence)*, (joint work with W. G. Boskoff), to appear in the Australian Math. Society Gazette.
- [2] *On some applications of AM-GM inequality*, (in Romanian; joint work with W. G. Boskoff) *Gazeta Matematica*, vol. **110** (2005), 145-151.
- [3] *Observations on Permutations Groups* (in Romanian), *Gazeta Matematică*, Bucharest, No.11/12(1987), 406-409.

Editorial work:

- Associate Editor for Australian Journal of Mathematical Analysis and Its Applications, since January 2005;
- Reviewer for Mathematical Reviews/MathSciNet, the database of American Mathematical Society.

Presentations and Conferences :

- *Using history in teaching Foundations of Geometry classes*, MAA Session on Using History of Mathematics in your Mathematics Courses, MAA/AMS Joint Conference, San Antonio, January 13, 2006.
- *Geometry Problems in U.S.A. Mathematical Competitions*, California Math. Council Conference, Palm Springs, November 5, 2005.
- *New Curvature Invariants and Nash's Embedding Theorem*, California State University San Bernardino, Colloquium, November 2, 2005.
- *From Euler's Line to Gossard Perspector*, Whittier College, Colloquium, October 28, 2005.
- *From Euclidean Geometry to the Geometry of Geodesics*, Cal State Fullerton, Colloquium, October 13, 2005.
- *Barbilian Spaces: The History*, AMS Special Session on History of Mathematics, Western Section Conference, Santa Barbara, April 18, 2005.
- *Chen's Fundamental Inequalities in Submanifold Geometry*, Cal Poly Pomona, Colloquium, April 8, 2004.
- *Fundamental Inequalities and Strongly Minimal Submanifolds*, Chapman University, Colloquium, April 24, 2003.
- *Fundamental Inequalities and Strongly Minimal Submanifolds*, MAA/AMS Joint Conference, January 16, 2003, Baltimore, in the session Recent Advances in Riemannian and Lorentzian Geometry.
- *New Riemannian and Kählerian curvature invariants and strongly minimal submanifolds*, Ph.D.Thesis Defense, Michigan State University, April 24, 2002.
- *Strongly minimal submanifolds*, Differential Geometry seminar, Michigan State University, April 5, 2002.
- *New Kählerian curvature invariants and strongly minimal submanifolds*, Differential Geometry seminar, Michigan State University, March 22, 2002.
- *Curvature, torsion and rectifying curves*, University of Arizona, Tucson, March 4, 2002.
- *Riemannian curvature invariants and their application to the minimal isometric immersion problem*, California State University, Fullerton, February 27, 2002.
- *Riemannian obstructions to minimal isometric immersions*, MAA/AMS Joint Conference, January 9, 2002, San Diego.
- *Riemannian obstructions to minimal isometric immersions*, Canadian Mathematical Society Winter Meeting, December 9, 2001, Toronto.
- *Curvature and Topology: Bonnet-Myers Type Theorems*, a sequence of talks in the Geometry/Topology Student Seminar, Michigan State University, Fall 2000.
- *Total mean curvature of compact manifolds*, Michigan State University, February 11 and 18, 1999.
- *Submersions riemanniennes avec des fibres austeres*, Conference of Romanian Institute of Academy, Iasi, Romania, September, 1995. (Based on the Master thesis.)
- *Sous-variétés obliques et applications*, École de Printemps de l'École Normale Supérieure de Paris, Sinaia, Romania, May 3, 1995.

Miscellaneous Publications

- *The story of Barbilian spaces, or what happened after "Joc secund"*, (written with W. G. Boskoff) (in Romanian) Observatorul cultural, nr.286, 15-21 September 2005, p.16;
- Review of the volume *Complex Analysis: The Geometric Viewpoint, Second edition*, by Steven G. Krantz, the MAA Online book review column, date of publication: January 2, 2005
<http://www.maa.org/reviews/complexgeometricviewpoint.html>
- *The Study of the Romanian Academic Forum* (joint work with E. Brailoiu, D. Branisteanu, E. Stamate, and G. Militaru) (in Romanian) Observatorul cultural, nr. 199-200, 16-31 December 2003;
This work has been published also by *Secolul XXI*, 2003, No.10-11-12, pp.271-291.

TEACHING

- **California State University, Fullerton** (08/2002 - present):
Discrete Mathematics I (Fall 2002, Spring 2003, Fall 2005)
Discrete Mathematics II (Spring 2004)
Analytic Geometry and Calculus I (Spring 2006)
Analytic Geometry and Calculus II (Fall 2002, Summer 2003, Fall 2004)
Business Calculus (Fall 2003)
Strategies of Proof (Summer 2003)
Foundations of Geometry (Spring 2003, Spring 2004, Spring 2005, Spring 2006)
Differential Geometry (Fall 2003, Fall 2004)
Advanced Calculus (Spring 2005, Summer 2005)
Abstract Algebra (Fall 2005)
- **Michigan State University** (08/1996-05/2002) :
Intermediate Algebra (Fall 1998, Fall 1999, Fall 2001, Leading TA during Fall 2001),
College Algebra (Fall 1997 and Spring 1998),
Applied Calculus (Spring 1999),
Calculus II (Lecturer, Fall 2000; Lecturer, Spring 2001),
Multivariable Calculus (recitation in Spring 1997, lecture in Summer 1998 and Summer 1999);
- **Police Academy „Al. I. Cuza” Bucharest** (10/1995-06/1996) :
Mathematical Analysis, recitation;
Special Mathematics for Engineering Sciences (complex analysis, ODE and PDE with application in mathematical physics), recitation.
- **University of Bucharest** (10/1994-06/1996) :
 - for Chair of Geometry: recitations of Geometry of Curves and Hypersurfaces and Geometry of Differential Manifolds;
 - for Chair of Algebra: recitations of Methods in Mathematical Education (covering College Algebra, Linear Algebra, Abstract Algebra, Plane and Space Geometry, Point-Set Topology).