

CURRICULUM VITAE

CLAUDIO GORODSKI

Personal Data

Born: on 11/09/1965 in São Paulo, Brazil
 Marital status: married to Nilsa Areán García, one son
 Citizenship: Brazilian
 Contact address: IME-USP
 Rua do Matão, 1010
 São Paulo, SP 05508-090, Brazil
 Telephones: (*55)(11)3091-6146 (office)
 (*55)(11)3091-6183 (fax)
 E-mail: gorodski@ime.usp.br
 Languages spoken: Portuguese, English, French, German, Italian, Spanish

Academic Degrees

March 1983 – December 1985 *Bacharelado*, Univ. of São Paulo.
March 1986 – July 1988 *Mestrado*, Univ. of São Paulo.
August 1988 – May 1992 Ph. D., UC Berkeley, title of dissertation: “Closed Minimal Hypersurfaces in Compact Symmetric Spaces”, adviser: Prof. Wu-Yi Hsiang.
August 1998 *Livre-Docência* at the Department of Mathematics at Univ. of São Paulo.

Academic Employment

March 1986 – July 1988 *Auxiliar de Ensino*, Univ. of São Paulo
August 1988 – May 1992 *Professor Assistente*, Univ. of São Paulo
May 1992 – August 1998 *Professor Assistente Doutor*, Univ. of São Paulo
August 1998 – September 2005 *Professor Associado*, Univ. of São Paulo
September 2005 – Present *Professor Titular*, Univ. of São Paulo

Visiting Positions

August 1992 – December 1992 Research Assistant, UC Berkeley
January 1995 – February 1995 Guest, Univ. of Paris-Sud, Orsay
January 1996 – February 1996 Guest, UC Berkeley
January 1997 Guest, Univ. of Paris 6
July 1997 Guest, Univ. of Paris 6
October 1999 – January 2001 Humboldt Research Fellow, Univ. of Cologne
February 2003 Guest, NCTS, Hsinchu, Taiwan
February 2004 Guest, Univ. of Florence
September 2006 Guest, Univ. of Rome 2
October 2006 – January 2007 Humboldt Research Fellow, Univ. of Augsburg
February 2008 Research in Pairs, Mathematisches Forschungsinstitut Oberwolfach

Research Interests

Lie transformation groups in Riemannian geometry.
Geometry of submanifolds.
Riemannian symmetric spaces.
Sub-Riemannian geometry.

List of Publications

- [1] Closed minimal hypersurfaces in compact symmetric spaces. *Internat. J. Math.* **3** (1992), 629–651.
- [2] Minimal sphere bundles in Euclidean spheres. *Geom. Dedicata* **53** (1994), 75–102.
- [3] On contact sub-Riemannian symmetric spaces. *Ann. Sci. École Norm. Sup. (4)* **28** (1995), 571–589. (With E. Falbel.)
- [4] Conformal sub-Riemannian geometry in dimension 3. *Mat. Contemp.* **9** (1995), 61–73. (With E. Falbel and J. M. Veloso.)
- [5] Sub-Riemannian homogeneous spaces in dimensions 3 and 4. *Geom. Dedicata* **62** (1996), 227–252. (With E. Falbel.)
- [6] Minimal hyperspheres in rank two compact symmetric spaces. *Bol. Soc. Brasil. Mat. (N.S.)* **27** (1996) 1–22.
- [7] Holonomy of sub-Riemannian manifolds. *Internat. J. Math.* **8** (1997), 317–344. (With E. Falbel and M. Rumin.)
- [8] The classification of simply-connected contact sub-Riemannian symmetric spaces. *Pacific J. Math.* **188** (1999), 65–82. (With P. Bieliavsky and E. Falbel.)
- [9] Constant curvature 2-spheres in \mathbf{CP}^2 . *Bol. Soc. Brasil. Mat. (N.S.)* **30** (1999), 287–291.
- [10] Complete minimal hypersurfaces in complex hyperbolic space. *Manuscripta Math.* **103** (2000), 221–240. (With N. Gusevskii.)
- [11] Delaunay-type surfaces in the real unimodular 2×2 group. *Ann. Mat. Pura Appl.* **180** (2001), 211–221.
- [12] Cycles of Bott-Samelson type for taut representations. *Ann. Global Anal. Geom.* **21** (2002), 287–302. (With G. Thorbergsson.)
- [13] Variationally complete actions on compact symmetric spaces. *J. Differential Geom.* **62** (2002), 39–48. (With G. Thorbergsson.)
- [14] The classification of taut irreducible representations. *J. Reine Angew. Math.* **555** (2003), 187–235. (With G. Thorbergsson.)
- [15] Copolarity of isometric actions. *Trans. Amer. Math. Soc.* **356** (2004), 1585–1608. (With C. Olmos and R. Tojeiro.)
- [16] Polar actions on compact symmetric spaces which admit a totally geodesic principal orbit. *Geom. Dedicata* **103** (2004), 193–204.
- [17] Enlarging totally geodesic submanifolds of symmetric spaces to minimal submanifolds of one dimension higher. *Proc. Amer. Math. Soc.* **132** (2004), 2441–2447.

- [18] Minimal Legendrian submanifolds and absolutely area-minimizing cones. *Diff. Geom. Appl.* **21** (2004), 337–347. (With V. Borrelli.)
- [19] Homogeneity rank of real representations of compact Lie groups. *J. Lie Theory* **15** (2005), 63–77. (With F. Podestà.)
- [20] A survey on the geometry of isometric actions, *Mat. Contemp.* **28** (2005), 163–182.
- [21] Taut submanifolds, *Rev. Un. Mat. Argentina.* **47** (2006), 61–72.
- [22] Polar actions on compact rank one symmetric spaces are taut. *Math. Z.* **255** (2007), 335–342. (With L. Biliotti.)
- [23] Singular riemannian foliations with sections, transnormal maps and basic forms. *Ann. Global Anal. Geom.* **32** (2007), 209–223. (With M. M. Alexandrino.)
- [24] Polar orthogonal representations of real reductive algebraic groups. *J. Algebra* **320** (2008), 3036–3061. (With L. Geatti.)
- [25] Taut representations of compact simple Lie groups. *Illinois J. Math.* **52** (2008), 121–143.
- [26] The discriminants associated to isotropy representations of symmetric spaces. *Transform. Groups* **17** (2012), 143–156.
- [27] Homogeneous structures and rigidity of isoparametric submanifolds in Hilbert space. *J. Fixed Point Theory Appl.* **11** (2012), 93–136. (With E. Heintze.)
- [28] On orbit spaces of representations of compact Lie groups. *J. Reine Angew. Math.* **691** (2014), 61–100. (With A. Lytchak.)
- [29] Representations whose minimal reduction has a toric identity component. *Proc. Amer. Math. Soc.* **143** (2015), 379–386. (With A. Lytchak.)
- [30] Tight Lagrangian homology spheres in compact homogeneous Kähler manifolds. *Israel J. Math.* **206** (2015), 413–429. (With F. Podestà.)

Chapter of Book

- [1] Tightness and Tautness, an appendix to “Notes on Morse Theory”, by D. V. Tausk, F. Mercuri and P. Piccione, IMPA Mathematical Publications, 23rd Brazilian Mathematics Colloquium, Rio de Janeiro, 2001.

Other manuscripts

- [1] Representations of compact Lie groups and the osculating spaces of their orbits. E-print arXiv:math/0203196v1. [math.DG] (With G. Thorbergsson.)
- [2] A metric approach to representations of compact Lie groups. Mathematics Research Institute Preprint Series, Department of Mathematics, Ohio State University, 2014.
- [3] Isometric actions on spheres with an orbifold quotient. E-print arXiv:1407.5863[math.DG]. (With A. Lytchak.)

[4] On homogeneous composed Clifford foliations. E-print arXiv:1503.09058[math.DG]. (With M. Radeschi.)

Grants and Fellowships

<i>August 1988 – July 1992</i>	FAPESP Ph. D. Scholarship at UC Berkeley.
<i>March 1994 – Present</i> <i>except Aug 1999 – Jul 2001 and Sep 2006 – Jan 2007</i>	CNPq federal research grant.
<i>1996 – 1997</i>	Two-year exchange program between research groups from São Paulo and Paris, supported by Univ. of São Paulo (USP) and Comité Français de la Coopération Universitaire avec le Brésil (COFECUB).
<i>October 1999 – January 2001</i>	Alexander von Humboldt Research Fellowship at Univ. of Cologne.
<i>November 2002 – October 2006</i>	Main Researcher, FAPESP Research Group Grant.
<i>October 2006 – January 2007</i>	Alexander von Humboldt Research Fellowship at Univ. of Augsburg.
<i>November 2007 – October 2011</i>	Coordinator, FAPESP Research Group Grant.
<i>April 2012 – March 2017</i>	Main Researcher, FAPESP Research Group Grant.

Selected Talks

<i>July 1993</i>	XIX Colóquio Brasileiro de Matemática, IMPA, Brazil
<i>July 1994</i>	IX Escola de Geometria Diferencial, UFES, Vitória, Brazil
<i>February 1995</i>	Groupe de Travail en Géométrie Non-Holonomie, ENS, Paris
<i>February 1995</i>	Séminaire de Topologie, Univ. of Paris-Sud
<i>February 1995</i>	Séminaire de Géométrie Riemannienne, Univ. of Grenoble
<i>July 1995</i>	XX Colóquio Brasileiro de Matemática, IMPA, Brazil
<i>January 1996</i>	Seminar on Geometry and Dynamics, UC Santa Cruz
<i>February 1996</i>	Workshop on Lie Groups, Lie Algebras and Their Representations, UC Berkeley
<i>February 1996</i>	Colloquium, Oregon State Univ.
<i>February 1996</i>	Differential Geometry Seminar, UC Berkeley
<i>July 1996</i>	X Escola de Geometria Diferencial, IMPA, Brazil
<i>January 1997</i>	Séminaire de Géométrie Appliquée, Univ. of Paris 6 et 7
<i>January 1997</i>	Séminaire de Topologie, Univ. of Paris-Sud
<i>September 1997</i>	International Colloquium in Sub-Riemannian Geometry, Univ. of São Paulo
<i>May 1998</i>	Conference on Lie Transformation Groups, Trento, Italy
<i>August 1998</i>	International Congress of Mathematicians, Berlin
<i>September 1998</i>	Oberseminar über Geometrie, Univ. of Cologne
<i>October 1999</i>	Oberseminar über Geometrie, Univ. of Cologne
<i>March 2000</i>	Séminaire de Géométrie Appliquée, Université de Paris 6 et 7
<i>March 2000</i>	Séminaire de Topologie, Université de Paris-Sud
<i>March 2000</i>	Séminaire de Géométrie, Université de Lyon 1
<i>April 2000</i>	Workshop on Harmonic Maps and Curvature Properties of Submanifolds, 2, Univ. of Leeds, England
<i>May 2000</i>	Geometria em Lisboa, Instituto Superior Técnico, Lisbon
<i>May 2000</i>	Oberseminar Differentialgeometrie, Univ. of Cologne
<i>June 2000</i>	Séminaire d'Analyse Harmonique, Univ. of Nancy, France

<i>September 2000</i>	International Conference on Differential Geometry in the Memory of Alfred Gray, Bilbao, Spain
<i>October 2000</i>	Oberseminar Differentialgeometrie, Univ. of Bonn
<i>July 2001</i>	XXIII Colóquio Brasileiro de Matemática, IMPA, Brazil
<i>August 2001</i>	Encontro de Geometria e Topologia, Unicamp, Brazil
<i>August 2001</i>	Seminário de Topologia, UFF, Niterói, Brazil
<i>February 2002</i>	Jornada de Geometria, UFF, Niterói, Brazil
<i>July 2002</i>	XII Escola de Geometria Diferencial, UFG, Goiânia, Brazil
<i>August 2002</i>	International Congress of Mathematicians, Beijing, China
<i>November 2002</i>	Seminário de Geometria, PUC, Rio de Janeiro, Brazil
<i>February 2003</i>	Mini-course on Lie groups, NCTS, Hsinchu, Taiwan
<i>June 2003</i>	Encuentro de Geometría Diferencial, Univ. of Córdoba, Argentina
<i>July 2003</i>	Oberseminar Geometrie, Topologie und Analysis, Univ. of Cologne
<i>August 2003</i>	Colloquium, PUC, Rio de Janeiro, Brazil
<i>October 2003</i>	Colloquium, USP, São Paulo, Brazil
<i>July 2004</i>	XIII School of Differential Geometry, USP, São Paulo, Brazil
<i>February 2005</i>	Summer School, UnB, Brasília, Brazil
<i>February 2005</i>	Workshop on Chaotic Dynamics and Differential Geometry, UFBA, Salvador, Brazil
<i>June 2005</i>	II Encuentro de Geometría Diferencial, Univ. of Córdoba, Argentina
<i>August 2005</i>	Differential Geometry and Physics, Eötvös Loránd University, Budapest, Hungary
<i>February 2006</i>	Encontro Paulista de Geometria, USP, São Paulo, Brazil
<i>June 2006</i>	I Congresso Latino-Americano de Grupos de Lie em Geometria, Unicamp, Campinas, Brazil
<i>August 2006</i>	International Congress of Mathematicians, Madrid, Spain
<i>September 2006</i>	Complex Analysis Seminar, Università degli Studi di Roma “Tor Vergata”
<i>September 2006</i>	Seminario di Geometria Differenziale, Università degli Studi di Torino
<i>October 2006</i>	Oberseminar Differentialgeometrie, University of Augsburg
<i>November 2006</i>	Seminar Sophus Lie, Erwin Schrödinger Institut, Wien
<i>November 2006</i>	Geometry Seminar, Universität Wien
<i>January 2007</i>	Oberseminar Differentialgeometrie, University of Augsburg
<i>August 2007</i>	XXVI Colóquio Brasileiro de Matemática, IMPA, Brazil
<i>August 2007</i>	III Encuentro de Geometría Diferencial, Univ. of Córdoba, Argentina
<i>November 2007</i>	VII Semana de Matemática, Universidade Federal de Uberlândia, Brazil
<i>June 2008</i>	AMS-SBM First Joint Meeting, IMPA, Brazil
<i>July 2008</i>	XV Escola de Geometria Diferencial, UFC, Fortaleza, Brazil
<i>February 2009</i>	Oberseminar Differentialgeometrie, University of Augsburg
<i>August 2009</i>	International Symposium in Differential Geometry in honour of Prof. Marcos Dajczer, IMPA, Brazil
<i>August 2009</i>	IV Encuentro de Geometría Diferencial, Univ. of Córdoba, Argentina

<i>August 2010</i>	International Congress of Mathematicians, Hyderabad, Índia
<i>September 2010</i>	Seminário de Geometria Diferencial, Univ. de Brasília
<i>January 2011</i>	Oberseminar Differentialgeometrie, Univ. of Münster
<i>July 2012</i>	XVII Escola de Geometria Diferencial, Manaus, Brazil
<i>August 2012</i>	4th Latin American Conference on Lie Groups and Geometry, CIMAT, Guanajuato, Mexico
<i>September 2012</i>	Seminário de Geometria Diferencial, IMPA, Rio de Janeiro
<i>February 2013</i>	6th OCAMI-KNUGRG Joint Differential Geometry Workshop in Symmetric Spaces and Lie Theory in Finite and Infinite Dimensions, Osaka City University
<i>February 2013</i>	Kagurazaka Geometry Seminar, Tokyo University of Science
<i>February 2013</i>	Oberseminar Differentialgeometrie, Univ. of Augsburg
<i>June 2013</i>	Encounters in Geometry, Cabo Frio, Rio de Janeiro
<i>August 2013</i>	Colloquium, Department of Applied Mathematics, USP
<i>September 2013</i>	Seminário de Geometria Diferencial, Univ. de Brasília
<i>August 2014</i>	Mini-course on representations of compact Lie groups, Ohio State Univ.
<i>September 2014</i>	Colloquium, Ball State University, Muncie, Indiana
<i>September 2014</i>	Geometry Seminar, Indiana University, Bloomington
<i>September 2014</i>	Felix Klein Seminar, Notre Dame University, Southbend
<i>November 2014</i>	Thematic Day on Riemannian and Sub-Riemannian geometry on Lie groups and Homogeneous Spaces, Institut Henri Poincaré
<i>January 2015</i>	Oberseminar, Karlsruher Institut für Technologie
<i>January 2015</i>	Oberseminar, Universität Stuttgart

Graduate Students

<i>May 1998</i>	Daniel V. Tausk, <i>Mestrado</i> (Master), Univ. of São Paulo
<i>March 2000</i>	Dulce M. de Almeida, <i>Doutorado</i> (Ph. D.), Univ. of São Paulo
<i>February 2006</i>	Eliza Ramos de Andrade, <i>Mestrado</i> , Univ. of São Paulo
<i>October 2006</i>	Henrique de Andrade Gomes, <i>Mestrado</i> , Univ. of São Paulo
<i>February 2008</i>	Marco Antonio Mucha Orco, <i>Mestrado</i> , Univ. of São Paulo
<i>March 2008</i>	Jaime Leonardo Orjuela Chamorro, <i>Mestrado</i> , Univ. of São Paulo
<i>April 2012</i>	Lucas Kaufmann Sacchetto, <i>Mestrado</i> , Univ. of São Paulo
<i>April 2012</i>	Marco Antonio Mucha Orco, <i>Doutorado</i> , Univ. of São Paulo
<i>June 2012</i>	Jaime Leonardo Orjuela Chamorro, <i>Doutorado</i> , Univ. of São Paulo

Other Activities

<i>February 1995 – Present</i>	Reviewer for <i>Mathematical Reviews</i> .
<i>September 1-5, 1997</i>	Local organization and scientific committee of the <i>International Colloquium in Sub-Riemannian Geometry</i> , USP, São Paulo (exchange program USP-COFECUB).
<i>July 26-30, 2004</i>	Local organization and scientific committee of the <i>XIII School of Differential Geometry</i> , USP, São Paulo.
<i>February 13-15, 2006</i>	Local organization and scientific committee of the <i>Encontro Paulista de Geometria</i> , USP, São Paulo.
<i>June 5-9, 2006</i>	Scientific committee of the <i>I Congresso Latino-Americano de Grupos de Lie em Geometria</i> , Unicamp, Campinas.

July 14-18, 2008

Scientific committee of the *XV School of Differential Geometry*, UFC, Fortaleza.

August 8-12, 2011

Local organization and scientific committee of the *III Encontro Paulista de Geometria*, USP, São Paulo.

May 4-8, 2015

Local organization and scientific committee of the *First Joint Meeting of Mathematicians Ohio State University - University of São Paulo*, USP, São Paulo.