

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
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 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
August – September 2014 Guest, Ohio State Univ.

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 $\mathbf{C}P^2$. *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.)
- [31] Isometric actions on spheres with an orbifold quotient. *Math. Ann.* **365** (2016), 1041–1067. (With A. Lytchak.)
- [32] Some remarks on polar actions. *Ann. Global Anal. Geom.* **49** (2016), 43–58. (With A. Kollross.)
- [33] On homogeneous composed Clifford foliations. *Münster J. Math.* **9** (2016). (With M. Radeschi.)
- [34] Polar foliations on quaternionic projective spaces. *Tohoku Math. J.* (2017). (With M. Dominguez-Vazquez.)
- [35] Polar symplectic representations. *Algebr. Represent. Theory* (2017). (With L. Geatti.)

[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.

Grants and Fellowships

August 1988 – July 1992

FAPESP Ph. D. Scholarship at UC Berkeley.

March 1994 – Present

CNPq federal research grant.

except Aug 1999 – Jul 2001 and Sep 2006 – Jan 2007

1996 – 1997

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).

October 1999 – January 2001

Alexander von Humboldt Research Fellowship at Univ. of Cologne.

November 2002 – October 2006

Main Researcher, FAPESP Research Group Grant.

October 2006 – January 2007

Alexander von Humboldt Research Fellowship at Univ. of Augsburg.

November 2007 – October 2011

Coordinator, FAPESP Research Group Grant.

April 2012 – March 2017

Main Researcher, FAPESP Research Group Grant.

Selected Talks

July 1993

XIX Colóquio Brasileiro de Matemática, IMPA, Brazil

July 1994

IX Escola de Geometria Diferencial, UFES, Vitória, Brazil

February 1995

Groupe de Travail en Géométrie Non-Holonome, ENS, Paris

February 1995

Séminaire de Topologie, Univ. of Paris-Sud

February 1995

Séminaire de Géométrie Riemannienne, Univ. of Grenoble

July 1995

XX Colóquio Brasileiro de Matemática, IMPA, Brazil

January 1996

Seminar on Geometry and Dynamics, UC Santa Cruz

February 1996

Workshop on Lie Groups, Lie Algebras and Their Representations, UC Berkeley

February 1996

Colloquium, Oregon State Univ.

February 1996

Differential Geometry Seminar, UC Berkeley

July 1996

X Escola de Geometria Diferencial, IMPA, Brazil

January 1997

Séminaire de Géométrie Appliquée, Univ. of Paris 6 et 7

January 1997

Séminaire de Topologie, Univ. of Paris-Sud

September 1997

International Colloquium in Sub-Riemannian Geometry, Univ. of São Paulo

May 1998

Conference on Lie Transformation Groups, Trento, Italy

August 1998

International Congress of Mathematicians, Berlin

September 1998

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
<i>August 2015</i>	IV School and Workshop on Lie Group Theory, Unicamp, Campinas, Brazil
<i>December 2015</i>	First Joint Meeting Brazil-Spain in Mathematics, UFC, Fortaleza, Brazil
<i>January 2016</i>	Mini-course on representations of compact Lie groups, King's College London
<i>January 2016</i>	Oberseminar Differentialgeometrie, Univ. of Cologne
<i>September 2016</i>	First Joint Meeting Brazil-Italy in Mathematics, IMPA, Rio de Janeiro
<i>November 2016</i>	Geometry and Lie theory, NTNU, Trondheim, Norway

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

February 2008

March 2008

April 2012

April 2012

June 2012

Marco Antonio Mucha Orco, *Mestrado*, Univ. of São Paulo
Jaime Leonardo Orjuela Chamorro, *Mestrado*, Univ. of São Paulo

Lucas Kaufmann Sacchetto, *Mestrado*, Univ. of São Paulo

Marco Antonio Mucha Orco, *Doutorado*, Univ. of São Paulo

Jaime Leonardo Orjuela Chamorro, *Doutorado*, Univ. of São Paulo

Other Activities

February 1995 – Present

September 1-5, 1997

July 26-30, 2004

February 13-15, 2006

June 5-9, 2006

July 14-18, 2008

August 8-12, 2011

May 4-8, 2015

Reviewer for *Mathematical Reviews*.

Local organization and scientific committee of the *International Colloquium in Sub-Riemannian Geometry*, USP, São Paulo (exchange program USP-COFECUB).

Local organization and scientific committee of the *XIII School of Differential Geometry*, USP, São Paulo.

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

Scientific committee of the *I Congresso Latino-Americano de Grupos de Lie em Geometria*, Unicamp, Campinas.

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

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

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