

## CURRICULUM VITAE

MARIA APARECIDA SOARES RUAS

MAJOR FIELD: Singularities and its applications.

PERSONAL INFORMATION: Born January, 05, 1948. Brazilian.

UNIVERSITY ADDRESS: Instituto de Ciências Matemáticas e de Computação, Universidade São Paulo, Caixa Postal 668, 13560-970, São Carlos, SP, Brazil. Phone: \*\*55-16-33739747.

### ACADEMIC INFORMATION

DOCTOR IN MATHEMATICS: Instituto de Ciências Matemáticas de São Carlos-USP, April 29, 1983, Thesis:  *$C^\ell$ -Determinação Finita e Aplicações*, Advisor: Luiz Antonio Fávaro.

LIVRE-DOCÊNCIA IN MATEMATICS: ICMC-USP, December 04, 1992, Thesis: *Singularidades de Aplicações Diferenciáveis: Teoria Geral e Aplicações*

FULL PROFESSOR: Instituto de Ciências Matemáticas de São Carlos-USP, May, 1996.

PROFESSOR SENIOR: Instituto de Ciências Matemáticas de São Carlos-USP, since 10/2012.

PROFESSOR EMERITUS Instituto de Ciências Matemáticas de São Carlos-USP, since 11/2019.

### SHORT VISITS- LAST 5 YEARS

- Institut des Mathématiques de Luminy, Marseille, France, April 2014.
- Mathematics Institute, University of Liverpool, March 2016.
- Instituto de Matemáticas de Cuernavaca, UNAM, Mexico, August 2017.
- University of València, Spain, 21 to 31, October 2019.
- IMPA, Rio de Janeiro, Brazil, January 2020.
- UFS, Aracajú, Brazil, February 2020.
- Oaxaca, Casa de Matemáticas Oaxaca, México, August 2023.

### FELLOWSHIPS AND GRANTS, LAST 15 YEARS

- CNPq Research Fellowship, since 1990. Level IB
- PROCAD-CAPES, cooperation between University of São Paulo, Universidade Estadual de Maringá, Universidade Federal da Paraíba and Universidade Estadual Paulista. Grant: US \$ 150.000,00; 08/2008 to 07/2012.
- Temático-FAPESP, Research Project. Grant: US\$ 100.000,00; 11/2008 to 10/2012.
- Projeto Universal, CNPq, Research Project. Grant: US\$ 18.000,00; 01/2010 to 12/2011.
- CAPES-JSPS, international cooperation with the University of Hokkaido, University of Kyushu and Yokohama National University, Japan, 01/2012 to 12/2013.
- Temático-FAPESP, # 2014/00304-2. Grant: US\$ 300.000,00; 06/2014 to 05/ 2019.
- Program Sciences without borders, project PVE, special visiting professor, Prof. Jean-Paul Brasseletl. Grant: US \$ 65.000,00, 06/2012 to 06/ 2015.
- Universal, CNPq. Grant: \$ 70.000,00, 01/2017 to 08/2020.
- FAPESP. Visiting professor: David Trotman, November-December 2019. Grant: \$ 12.833,71.
- Projeto Temático FAPESP, # 2019/21181-0 , Pesquisador Principal. (Coordinator: Regilene de Oliveira).

### MEETINGS ORGANIZATION, LAST 10 YEARS

- Member of the Scientific Committee of the Workshop on Singularities in Geometry and Applications, 15.05.2011 - 21.05.2011, Bedlewo , Poland.
- Member of the Scientific Committee of the workshop “Geometry and Topology of Singular Spaces”, held in honour of David Trotman 60, Marseille, France 2012.
- Member of the Scientific Committee of the Conference: Geometry of Singular Spaces and Maps -CIRM, Marseille, March 2-6, 2015.
- Member of the Scientific Committee of the Workshop ”Singularities and Applications, Victor Goryunov 60”, University of Liverpool, 03/2016.
- Member of the Scientific Committee of the Workshop “València V”, UNAM, Mexico, in honour of Federico Sanchez Bringas 60, July 31 to August 4, 2017.
- Member of the Scientific Committee of the Brazil-Mexico 3rd Meeting on Singularities, Cuernavaca, August 7 to 11, 2017.
- Member of the Scientific Committee of the 32<sup>o</sup> Colóquio Brasileiro de Matemática, IMPA, July 2019.
- Member of the Scientific Committee of the 6<sup>th</sup> Brazilian Northeastern Meeting on Singularities, UFPB, 08 - 12 July, 2019.
- Member of the Scientific Committee of the Brazil-Chile-Mexico Meeting on Singularities, Chile, March 2019.
- Member of the Scientific Committee of the Non-Isolated Singularities and derived Geometry. A celebration of the 60<sup>th</sup> birthday of David Massey , Cuernavaca, 29/07/2019 to 3/08/2019.
- Member of the Scientific Committee of 33<sup>o</sup>, 34<sup>o</sup> and 35<sup>o</sup> Colóquios Brasileiros de Matemática, IMPA, July 2021, July 2023 and July 2025 respectively.
- Member of the Scientific Committee of the XVIII- International Workshop on Real and Complex Singularities, València, 2024.

### OTHER ACTIVITIES

Head of the Department of Mathematics, ICMC-USP, 1995 to 1997.

Vice-Dean of the Instituto de Ciências Matemáticas e de Computação, USP, 1998 to 2002.

Member of the Directing Council of the Brazilian Mathematical Society, 10/1993 to 10/1995, and from 09/2007 to 07/2009.

Vice-President of the Permanent Evaluation Committee of the University of Sao Paulo, 01/2003 to 12/2005.

Member of the Evaluation Committee of the Postgraduate Programs in Mathematics, Probability and Statistics, CAPES, 2004-2006, 2013-2015 and 2021- 2023.

First Secretary of the Brazilian Mathematical Society, from August 2009 to July 2011.

Member of the Mathematics/Probability and Statistics Committee of the CNPq, 2015-2017, and 2023-2025.

Member of the Board of the Brazilian Mathematical Society, 2023-2025.

## PUBLICATIONS AND STUDENTS

Books: Edited: 5; Published: 1.

Papers (published): 88

Master dissertations supervised: 11

PhD Thesis supervised: 22, including 7 jointly supervised PhD programs, and 3 co-tutelle PhD programs.

Supervision of 21 postdoc fellows.

## PRIZES AND DISTINCTIONS

- Member of the Brazilian Academy of Sciences, since December 2008.
- Comenda da Ordem do Mérito Científico, in 2010.
- Honorary Associate of the Brazilian Mathematics Society, from 2021.
- Professor Emeritus of the Instituto de Ciências Matemáticas e de Computação, USP, since 2019.
- Fellow elected to TWAS in October 31, 2024.

## LIST OF TEN SELECTED PUBLICATIONS

- (1) Ruas, M.A.S., *On the degree of  $C^\ell$ -determinacy*. Math. Scandinavica, 59(1986:59-70.
- (2) Rieger, J.H. & Ruas, M.A.S. *Classification of  $\mathcal{A}$ -simple germs from  $k^n$  to  $k^2$* . Compositio Math. 79(1991):99-108.
- (3) Mochida, D.H. ; Romero-Fuster, M.C.; Ruas, M.A.S. *The Geometry of surfaces in 4-space from a contact viewpoint*. Geometriae Dedicata, Vol. 54, 323-332, (1995).
- (4) Garcia, R.; Mochida, D.H.; Romero-Fuster, M.C.; Ruas, M.A.S. *Inflection points and topology of surfaces in 4-space*. Transactions Am. Math. Soc. 352 (2000), no. 7, 3029-3043.
- (5) Ruas, M.A.S. ; Seade, J. ; Verjovsky, A., *On Real singularities which a Milnor fibration*, Birkhauser Verlag, Ed. M.Tibar and A. Libgober, series "Trends in Mathematics", (2002).
- (6) Tibar, M. ; Dias, L. R. G. ; Ruas, M. A. S. . *Regularity at infinity of real mappings and a Morse Sard theorem*. Topology (Oxford), v. 5, p. 323-340, 2012.
- (7) Oset-Sinha, R.; Ruas, M.A.S.; Wik Atique, R. .*Classifying codimension two multi-germs*. Math. Z. 278 (2014), no. 1-2, 547-573.
- (8) Gaffney, Terence; Grulha, Nivaldo G.; Ruas, Maria A. S.; *The local Euler obstruction and topology of the stabilization of associated determinantal varieties*. Math. Z. 291 (2019), no. 3-4, 905–930.
- (9) Farnik, M.; Jelonek, Z.; Ruas, M. A. S.; *Whitney theorem for complex polynomial mappings*. Math. Z. 295 (2020), no. 3–4, 1039–1065.
- (10) Nguyen, Nhan; Ruas, Maria; Trivedi, Saurabh, *Classification of Lipschitz simple function germs*. Proc. London Math. Soc. (3) 121 (2020), no. 1, 51–82.
- (11) Oset Sinha, R.; Ruas, M. A. S.; Wik Atique, R. *The extra-nice dimensions*. Mathematische Annalen, v. 384, p. 1243–1273, 2022.