Giselle Antunes Monteiro

Contact information: Institute of Mathematics, Czech Academy of Sciences

Žitná 25, 115 67 Praha 1, Czech Republic

gam@math.cas.cz   phone: +420 222 090 744

Research experience

Institute of Mathematics, Czech Academy of Sciences

May 2017 –   present   Research fellow

Mathematical Institute, Slovak Academy of Sciences

Apr. 2016 – Mar. 2017   Marie Curie fellow (postdoctoral position)

(in the frame of SASPRO programme - Marie Curie Actions)

Institute of Mathematics, Czech Academy of Sciences

Jul. 2015 – Feb. 2016   Research fellow (first stage)

Jul. 2013 – Jun. 2015   Postdoctoral fellow

(supported by Academic Human Resource Program AS CR)

Oct. 2012 – Jun. 2013   Visiting Scholar

Research interests:

Kurzweil integration and its applications to mathematical modeling; Generalized differential equations; Ordinary and functional differential equations; Dynamic equations on time scales; Hysteresis operators.

Academic background

- PhD in Mathematics (2009–2012, defense Feb. 14, 2012)

Institute of Mathematics and Computer Sciences, University of São Paulo, Brazil

PhD thesis: *Generalized linear differential equations in a Banach space: continuous dependence on parameters and applications.*

- Master of Science in Mathematics (2005–2007)

Institute of Mathematics and Statistics, University of São Paulo, Brazil

Master thesis: *Kurzweil integral for Riesz space-valued functions: an introduction* (in Portuguese)

- Undergraduate studies - Mathematics (2001–2004)

Federal University of São Carlos, Brazil

Teaching experience

Aug. 2007 – Dec. 2008	Adjunct Lecturer
	Mathematical Department - Federal University of São Carlos, Brazil
	<u>Subjects taught:</u>
	Linear algebra, Differential and integral calculus, Analytic geometry
Jan. 2008 – Feb. 2008	Invited Lecturer - Summer school
	Institute of Mathematics and Statistics - University of São Paulo, Brazil
	In charge of the course 'Metric spaces'

Scientific visits

Jan. 2017	University of Santiago de Compostela, Santiago de Compostela, Spain
Dec. 2016	Adam Mickiewicz University, Poznań, Poland
Nov. 2016	Tsinghua University/Hohai University, China
Oct. 2015	Stefan cel Mare University of Suceava, Romania
Apr. 2015	Adam Mickiewicz University, Poznań, Poland

Conference talks (in the past 3 years)

- 30th International Summer Conference on Real Functions Theory - 2016, Stará Lesná, Slovakia

- O.D.E.60 - 2016, Brno, Czech Republic

- Summer Symposium in Real Analysis XL - 2016, Sarajevo, Bosnia and Herzegovina

- Seminar on ODEs and Integration Theory - Special session in honor of the 90th birthday of Jaroslav Kurzweil - 2016, Prague, Czech Republic

- ICDDEA 2015, Amadora, Portugal

- Summer Symposium in Real Analysis XXXVIII - 2014, Prague, Czech Republic

Other academic merits

- Co-advisor of Master thesis (since Mar. 2016), student André L. A. da Costa, Federal University of Ceará, Brazil

- Member of organizing committee in the following events: *Summer Meeting on Differential Equations - 2012, III Workshop on Differential Equations - 2011*, held at the University of São Paulo, Brazil

- Visiting doctoral student at the Institute of Mathematics of the Czech Academy of Sciences (six-month traineeship, Jun.–Nov. 2010). Supported by CAPES Foundation (Brazilian Ministry of Education)

Publications

Published papers

1. G. A. Monteiro, *Adjoint classes of Kurzweil-Stieltjes integrable functions*, Monatshefte für Mathematik (2017) DOI 10.1007/s00605-017-1071-9

2. G. A. Monteiro, B. Satco, *Distributional, differential and integral problems: equivalence and existence results*, Electronic J. of Qualitative Theory of Diff. Eq. **7** (2017), 1–26. DOI 10.14232/ejqtde.2017.1.7

3. P. Krejčí, H. Lamba, G. A. Monteiro, D. Rachinskii, *The Kurzweil integral in financial market modeling*, Mathematica Bohemica **141** (2016), 261–286.

4. G. A. Monteiro, A. Slavík, *Extremal solutions of measure differential equations*, J. Math. Anal. Appl. **444** (2016), 568–597.

5. G. A. Monteiro, U. M. Hanung, M. Tvrdý, *Bounded convergence theorem for abstract Kurzweil-Stieltjes integral*, Monatshefte für Mathematik **180(3)** (2016), 409–434.

6. G. A. Monteiro, *On functions of bounded semivariation*, Real Analysis Exchange **40 (2)** (2014/15), 233–276.

7. G. A. Monteiro, A. Slavík, *Generalized elementary functions*, J. Math. Anal. Appl. **411** (2014), 838–852.

8. G. A. Monteiro, A. Slavík, *Linear measure functional differential equations with infinite delay*, Mathematische Nachrichten **287** (2014), 1363–1382.

9. G. A. Monteiro, M. Tvrdý, *Continuous dependence of solutions of abstract generalized linear differential equations with potential converging uniformly with a weight*, Boundary Value Problems **71** (2014), 1–18.

10. G. A. Monteiro, M. Tvrdý, *Generalized linear differential equations in a Banach space: continuous dependence on a parameter*, Discrete and Continuous Dynamical Systems **33(1)** (2013), 283–303.

11. G. A. Monteiro, M. Tvrdý, *On Kurzweil-Stieltjes integral in a Banach space*, Mathematica Bohemica **137** (2012), 365–381.

12. G. A. Monteiro, R. Fernandez, *Kurzweil integral for Riesz space-valued functions: uniform convergence theorem*, Mathematica Slovaca **62** (2012), 17–24.

13. Z. Halas, G. A. Monteiro, M. Tvrdý, *Emphatic convergence and sequential solutions of generalized linear differential equations*, Memoirs on Diff. Eq. and Mathematical Physics **54** (2011), 27–49.

Complete papers in conference proceedings

G. A. Monteiro, R. Fernandez, *Uniform convergence theorem for Kurzweil integrable functions - another version*, Seminário Brasileiro de Análise, 66 (2007) (in Portuguese)

Precontract with publishers

G. A. Monteiro, A. Slavík, M. Tvrdý, Kurzweil-Stieltjes integral (Theory and Applications)
Precontract with: World Scientific Publishing, Singapore.