Prof. Dr. Theo Allan Darn Zapata

Departamento de Matematica
Universidade de Brasília
Asa Norte - Brasília
70910-900, DF. Brasil

Phone: +55 61 3107-6481
zapata (at) mat.unb.br
http://zapata.mat.unb.br/
http://lattes.cnpq.br/4045130632120805/

Personal Information

Date of Birth: December 23, 1982.

Citizenship: Brazilian.

Education

Doutor em Matemática (PhD), Universidade de Brasília, 2011.

Mestre em Matemática (MSc), Universidade de Brasília, 2006.

Bacharel em Matemática (BSc), Universidade Federal de São Carlos, 2003.

Professional Experience

Professor Adjunto, Universidade de Brasília, 2013– . [Tenured in 2015]

Professor Substituto, Universidade de Brasília, 2006–2007.

Lecturer/Tutor, Brazilian Mathematical Olympiads for Public Schools, 2006–2007.

Service at the Universidade de Brasília

Member of the Higher Council of Teaching, Research, and Extension, 2016–2018.

Member of the Higher Council of Administration, 2015–2018.

Member of the Council of the Exact Sciences Institute, 2015–2018.

Member of the Assessor Committee of Undergraduate Research, 2017–2018.

Research Interests

Profinite Theory of Groups.

Algebra.

Research Experience and Visits

Post Doctorate, Universidade do Porto, 2018– .

Post Doctorate, Universidade de Brasília, 2011–2012.

Visiting Scholar, Università Degli Studi di Milano Bicocca, Jan-Jul 2010.

Visiting Scholar, Instituto de Matemática Pura e Aplicada, Jan-Feb 2007.

Prof. Dr. Theo Allan Darn Zapata

Research Papers

Published

- *Splitting theorems for pro-p groups acting on pro-p trees.* Selecta Math., v. 22, p. 1245-1268, 2016. (With W. Herfort and P. Zalesskii). `http://doi.org/10.1007/s00029-015-0217-7`

Accepted for publication

- *Profinite extensions of centralizers and the profinite completion of limit groups.* To appear in Rev. Mat. Iberoam. (With P. Zalesskii). `http://arxiv.org/abs/1711.01500`

- *Profinite groups in which centralizers are abelian.* To appear in Israel J. Math. (With P. Shumyatsky and P. Zalesskii). `http://arxiv.org/abs/1807.02429`

Selected Lectures

Invited lectures

- *Automorphic Forms and the Hecke-Maass and Rankin-Selberg L-functions.* Analytic Number Theory Seminar, Instituto de Matemática Pura e Aplicada, 2007.

Contributed talks

- *Acylindrical actions on profinite trees and Kurosh-like decompositions.* Lie and Jordan Algebras, their Representations and Applications VII (dedicated to Ivan Shestakov's 70th birthday), 2017.

- *Commutativity-transitive profinite groups.* Lie and Jordan Algebras, their Representations and Applications VI (dedicated to Efim Zelmanov's 60th birthday), 2015.

- *Profinite completion of limit groups.* Groups, Rings and Group Rings 2014 (dedicated to Cesar Polcino Milies's 70th birthday), 2014.

- *Splitting theorems for pro-p groups acting on pro-p trees and 2-generated pro-p subgroups of free pro-p products with procyclic amalgamations.* Groups St. Andrews 2013, 2013.

Teaching

Graduate

- Topics in Number Theory (Diophantine equations).

- Topics in the History of Mathematics.

- Algebra seminar.

Undergraduate

- Number Theory 2 (Cours d'arithmétique de J-P. Serre - Ch. I, II, VI).

- Calculus 3 (Calculus on manifolds of M. Spivak). [12 courses]

- Number Theory 1 (Number theory for beginners of A. Weil). [7 courses]

- Calculus 1.

Prof. Dr. Theo Allan Darn Zapata

Students

Master

- Fernando Barbosa. To be defined. 2017– .
- Rubens Cardoso. To be defined. 2017– .
- Lazaro Pereira. To be defined. 2018– .

Undergraduate

- Henrique Souza. Cohomology of profinite groups. 2018– . [CNPq support].
- Nowras Otmen. Arnol'd's topological Galois theory. 2018– .
- Pedro Souza. Tate cohomology. 2018– . [partial FUB support].
- Daniel Oliveira. Profinite graphs. 2016–2017. [CNPq support].
- Henrique Souza. Homological Algebra and Groups. 2016–2017. [CNPq support].
- Mariana Puga. Free groups. 2016/1–2016/2. [MEC support].
- Pedro Souza. A general reciprocity law. 2016–2017. [FAPDF support].
- Daniel Oliveira. Differential geometry on graphs. 2015–2016. [MEC support].
- Pedro Souza. Galois theory of valuations. 2015–2016. [MEC support].
- Lucas Bilar. Pro-p groups and their completed group algebras. 2014–2015. [MEC support].
- Pedro Souza. Local fields. 2014–2015. [MEC support].
- Lucas Bilar. Groups and Knot theory. 2013–2014. [MEC support].

Languages

Portuguese.

English.

Spanish.

Italian.

French.

Organized International Conferences

Algebra and Number Theory Symposium celebrating the 75th birthdays of Prof. Rudolf Maier and Prof. Said Sidki. Brasília, 2016. [Over 60 participants]

Conference on Algebra and Applications In honour of Prof. Said Sidki on the occasion of his 70th birthday. Caldas Novas, 2011. [Over 90 participants]

Prof. Dr. Theo Allan Darn Zapata

Financial Support

FAPDF, travel grant, 2017.

FAPDF, research grant for international joint project, 2015–.

CNPq, research grant, 2013–2016.

CAPES/DGU, research grant for joint project with Bilbao, 2013–2016.

CNPq, post-doctorate fellowship, 2011–2012.

CNPq-CAPES, graduate fellowship, 2007–2011.

FAPERJ, IMPA Summer School, Jan-Feb 2007.

CNPq-CAPES, graduate fellowship, 2004-2006.

FAPESP, research grant, 2003.

MEC (Brazilian Ministry of Education and Culture), undergraduate fellowship, 2001-2003.

Professional Societies

Sociedade Brasileira de Matemática.

References

Pavel Zalesski
Departamento de Matematica
Universidade de Brasilia
Asa Norte - Brasilia
70910-900, DF. Brasil
pz@mat.unb.br

Said Sidki
Departamento de Matematica
Universidade de Brasilia
Asa Norte - Brasilia
70910-900, DF. Brasil
sidki@mat.unb.br

Thomas Weigel
Dipartimento di Matematica e Applicazioni
Universita di Milano-Bicocca
Via R. Cozzi, No. 53
20125, Milano. Italy
thomas.weigel@unimib.it

Nigel Pitt
Mathematics & Statistics
The University of Maine
333 Neville Hall
Orono, ME04469. USA
pitt@math.umaine.edu

Ruidival dos Santos
Departamento de Matematica
Universidade Federal de Sao Carlos
UFSCar - Sao Carlos
13565-905, SP. Brasil
santos@dm.ufscar.br

Porto, July 2018.