

Laguzzi Giorgio

CURRICULUM VITAE

Employment history

- Assistant Professor (akademischer Rat) at the University of Freiburg, in the logic group led by Heike Mildenerger and Martin Amador-Pizarro, October 2014 - 2020.
- Post-doctoral researcher (wissenschaftlicher Mitarbeiter) at the University of Hamburg, in the logic group led by Benedikt Loewe, October 2013 - September 2014.
- Post-doctoral researcher (wissenschaftlicher Mitarbeiter) at the University of Freiburg, October 2012 - September 2013.
- Doctoral student at the Kurt Goedel Research Center for Mathematical Logic, under the supervision of Sy David Friedman, October 2008 - July 2012, FWF grant (Austrian Science Fund), project reference number: P22430-N13.

Education and academic degrees

- Abilitazione Scientifica Nazionale (Scientific Italian Habilitation as associate professor), settore concorsuale MAT 01/A1, 08.07.2020.
- Venia Legendi, German Habilitation, University of Freiburg, 16.07.2020.
- PhD, University of Vienna, Kurt Goedel Research Center, 04.06.2012.
Thesis: ``Arboreal forcing notions and regularity properties of the real line".
Supervisor: Prof. Sy David Friedman.
grade: with Distinction.
- Master degree in Mathematics, Universita` degli Studi di Torino, 01.10.2008.
Thesis: ``Lebesgue misurabilita` e cardinali inaccessibili".
Advisor: Prof. Alessandro Andretta.
grade: 110/110 e lode (con menzione speciale).
- Bachelor degree in Mathematics, Universita` del Piemonte Orientale, 29.06.2006.
Thesis: "Teoremi classici di convergenza".
Advisor: Prof. Fabio Rapallo.
Grade: 110/110 e lode.

AWARDS

Winner of “Paolo Gentilini Prize 2019”, awarded by AILA (Associazione Italiana di Logica e sue Applicazioni) to a young researcher in the research field of mathematical logic.

RESEARCH ACTIVITY

Publications (and paper submitted)

1. *Arboreal forcing notions and regularity properties of the real line*, Universitaet Bibliothek, Universitaet Wien, 2012.
DOI: 10.25365/thesis.20405
2. *On the separation of regularity properties of the reals*, Archive for Mathematical Logic (2014), Volume 53, Issue 7-8, pp 31-747, 2014.
3. *Some considerations on amoeba forcing notions*, Archive for Mathematical Logic (2014), Volume 53, Issue 5-6, pp 487-502, 2014.
4. *Generalized Silver and Miller measurability*, Mathematical Logic Quarterly (2015), Volume 61, Issue 1-2, pp 91-102, 2015.
5. *Full-splitting Miller trees and infinitely often equal reals*, (joint with Yurii Khomskii), Annals of Pure and Applied Logic, 168, no. 8, 1491–1506, 2017.
6. *Questions on generalized Baire spaces*, (joint with Yurii Khomskii, Benedikt Loewe e Ilya Sharankou), Mathematical Logic Quarterly, Volume 62, Issue 4-5, 2016.
7. *A null ideal for inaccessible*, (joint with Sy Friedman), Archive for Mathematical Logic, Volume 56, Issue 5-6, pp 691-697, 2017.
8. *Uncountable trees and Cohen kappa-reals*, Journal of Symbolic Logic, Volume 84, Issue 3, pp. 877-894, 2019.
9. *More on trees and Cohen reals* (joint with Brendan Stuber-Rousselle), Mathematical Logic Quarterly, Volume 66, Issue 2, pg. 173-181, 2020.
10. *On the representation and construction of social welfare orders*, (joint with Ram S. Dubey and Francesco Ruscitti), Mathematical Social Sciences, Volume 107, pp. 17-22, 2020.
11. *Extended Gini index*, (joint with Ram S. Dubey), Economics Bulletin, Vol. 41, Issue 2, pp. 654-661, 2021.
12. *On social welfare orders satisfying anonymity and asymptotic density-one Pareto*, (joint with Ram S. Dubey and Francesco Ruscitti), Mathematical Social Sciences, Volume 111, pp. 26-33, 2021.
ArXiv: <https://arxiv.org/abs/2008.05879>

13. *Equitable preference relations on infinite utility streams*, (joint with Ram S. Dubey), accepted for publication, Journal of Mathematical Economics, 2021.
DOI: [10.1016/j.jmateco.2021.102542](https://doi.org/10.1016/j.jmateco.2021.102542)
ArXiv: <https://arxiv.org/abs/2012.06481>
14. *Laver trees in the generalised Baire space*, (joint with Yurii Khomskii, Marlene Koelbing and Wolfgang Wohofsky), accepted for publication, to appear in Israel Journal of Mathematics, 2021.
ArXiv: <https://arxiv.org/abs/2009.01886>
15. *Social welfare relations and irregular sets*, (joint with Ram S. Dubey) submitted.
ArXiv: <https://arxiv.org/abs/2004.10843>
16. *On splitting trees*, (joint with Heike Mildenberger and Brendan Stuber-Rousselle), submitted.
Arxiv: <https://arxiv.org/abs/2004.10840>
17. *Mathias and Silver forcings parametrised by density* (joint with Heike Mildenberger and Brendan Stuber-Rousselle), submitted.
ArXiv: <https://arxiv.org/abs/2102.06009>
18. *The non-democratic side of regular sets*, submitted.
ArXiv:<https://arxiv.org/abs/2004.10905>

In preparation

19. *How rare are properties of preference relations*, (joint with Ram S. Dubey), in preparation.
20. *A characterization of Rawls function via risk measures*, (joint with Ram S. Dubey and Francesco Ruscitti).

Invited speaker at conferences and workshops

1. Generalized Silver measurability, Freiburg Set Theory Workshop, June 2014 .
2. Full splitting Miller trees and ioe reals, DMV 2014 - Set Theory Thematic Session, Poznan, September 2014.
3. A null ideal for inaccessible?, DMV 2015 - Set Theory Thematic Session, Hamburg, September 2015.
4. Trees on uncountables and pure decision, Bonn set theory workshop: generalized Baire space, September 2016.
5. Infinite utility streams and irregular sets, Logic Colloquium, Stockholm, August 2017.
6. kappa-trees and Cohen kappa-reals, Royal Academy Colloquium on Generalized Baire spaces, August 2018.

7. The non-constructive nature of social welfare relations, DMV Annual Meeting 2020 - Mathematical Logic Thematic Session, Chemnitz, September 2020.

Other seminars in conferences and workshops as contributed talks

- Tree forcing and regularity properties, conferenza AILA, Pisa, April 2014 .
- Roslanowski and Spinas dichotomies, Monaco, September 2014.
- Generalized Baire spaces, Welcome home, Torino, December 2014.
- A null ideal for inaccessible, DMV 2015, Set Theory Thematic Session, Hamburg, September 2015.
- Amoeba for uncountables, Welcome home, Torino, December 2015.
- Uncountable trees and Cohen sequences, Workshop on Generalized Baire Spaces, Bonn, September 2016.
- Social welfare relations and descriptive set theory, AILA meeting, Padova, September 2017.
- Kappa trees and Cohen kappa sequences, Workshop on Generalized Baire Spaces, Amsterdam Royal Academy, August 2018.

Invited research seminars

- Arboreal forcing e proprieta` di regolarita`, Universita` di Torino, 05.04.2012.
- Generalised Amoeba forcing and Sigma₁²-measurability, Prague mini-workshop (KGRC),
- Set theory, forcing and real line, Universita` del Piemonte Orientale, 27.03.2013
- Silver without Lebesgue and Miller, Christian-Albrechts-Universitaet Kiel, Seminar zur Logik, 19.11.2013.
- Regularity properties and tree-like forcings in the generalized Cantor space, Christian-Albrechts-Universitaet Kiel, Seminar zur Logik, 21.11.2013.
- Silver versus club-Silver in the generalized Cantor space, Alberts-Ludwig-Universitaet Freiburg, Oberseminar, 18.12.2013.
- Roslanowski and Spinas dichotomies, Universitaet Bonn, Oberseminar, 14.07.2014.
- A null ideal for inaccessible?, University of Bristol, Mathematical Logic seminar, 24.03.2015.
- Amoebas for uncountable cardinals, University of Bonn, Set theory Oberseminar, 22.06.2015.

- Social welfare relations and descriptive set theory, AILA meeting, Padova, September 2017.

TEACHING EXPERIENCE

- Winter semester 2012/2013, Universitaet Freiburg:
assistant to the course "Mathematische Logik fuer Informatiker", given by Prof. Martin Ziegler;
assistant to the seminar "Game theory", given by Dr. Luca Motto Ros.
 - Summer semester 2013, Universitaet Freiburg:
assistant to the seminar "Kardinalzahlinvarianten", given by Prof. Heike Mildenerger;
assistant to the course "Descriptive set theory", given by Dr. Luca Motto Ros.
 - Winter semester 2013/2014, Universitaet Hamburg:
assistant to the course "Topologie", given by Prof. Janko Latschev;
assistant to the course "Hoehere Analysis", given by Prof. Timo Reis.
 - Summer semester 2014, Universitaet Hamburg:
"Descriptive Set Theory", with Dr. Stefan Geschke.
"ML seminar", seminario di teoria degli insiemi.
 - Winter semester 2014/2015, Universitaet Freiburg:
course "Set theory of the real line".
 - Summer semester 2015, Universitaet Freiburg:
assistant to the course "Mathematische Logik", given by Prof. Martin Ziegler;
seminar "Cryptography".
 - Winter semester 2015-2016:
assistant to the course "Logik fuer Informatiker", given by Prof. Sebastian Goette.
assistant to the course "Mengenlehre", given by Prof. Heike Mildenerger.
 - Summer semester 2016:
seminar "Infinite games and regular sets".
assistant to the seminar "Proper und stark proper Forcing", given by Prof. Heike Mildenerger.
 - Winter semester 2016-2017:
assistant to the seminar "Massalgebren und die Maharam-Probleme", given by Prof. Heike Mildenerger.
 - Summer semester 2017:
seminar "Cryptography".
assistant to the seminar "Spielstrategien", given by Prof. Heike Mildenerger.
 - Winter semester 2017/2018:

assistant to the seminar "Metriken auf den Ordinalzahlen" given by Prof. Heike Mildenerger.

assistant to the course "Logik fuer Informatiker", given by Dr. Markus Junker.

- Summer semester 2018:

assistant to the course "Mathematische Logik" given by Prof. Heike Mildenerger.

assistant to the course "Elementargeometrie", given by Prof. Wolfgang Soergel.

- Winter semester 2018/2019

assistant to the seminar "Die Keisler-Ordnung" given by Prof. Heike Mildenerger.

- Summer semester 2019:

"Infinite games".

assistant to the course "Rekursionstheorie", given by Prof. Heike Mildenerger.

- Winter semester 2019/2020:

Course "Infinitary combinatorics".

- Summer semester 2020:

assistant to the course "Mathematische Logik"

assistant to the course "Elementargeometrie"

ORGANIZATIONAL ACTIVITY

- Hamburg Set Theory Workshop (co-organizer), February 2014 (with Benedikt Loewe)
- Amsterdam Set Theory Workshop: generalized Baire spaces (co-organizer), November 2014 (with Benedikt Loewe)
- Hamburg Set Theory Workshop: generalized Baire spaces, September 2015 (co-organizer: Wolfgang Wohofsky).

Other

- Referee for Journal of Symbolic Logic.
- Referee for Archive for Mathematical Logic.
- Member of AILA.