Tommaso Moraschini
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Born 25.8.1988

Education and qualification
- *Accreditation* for the *reader* position in the Catalan university system 2018.
- *PhD in Pure and Applied Logic*, University of Barcelona 6.2016
  Thesis title: Investigations into the role of translations in abstract algebraic logic
  Supervisors: Professors R. Jansana and J.M. Font
- *Master in Philosophical Sciences*, University of the Studies of Milan, 7.2013
  Thesis title: Some topic in abstract algebraic logic
  Supervisor: Professor S. Bozzi
- *Master in Pure and Applied Logic*, University of Barcelona 7.2012
  Thesis title: The interplay between languages and models in abstract algebraic logic
  Supervisor: Professor J.M. Font

Employment history

2019–present	Faculty of Philosophy, University of Barcelona Tenure Track (November–present)
2018–2019	Institute of Computer Sciences, Czech Academy of Science Scientist (January–present)
2016–2017	Institute of Computer Sciences, Czech Academy of Science Postdoctoral fellow (July–December)
2013–2016	University of Barcelona PhD student (September–June)

Research interests
- Mathematical Logic
- (Abstract) Algebraic Logic
- Duality Theory
- Universal Algebra and Category Theory
- Substructural Logic (especially Intuitionistic and Relevance Logics)

Basic scientometric data
- 20 journal papers + 2 conference papers + 1 book chapter + 4 submitted manuscripts

Prizes and awards
- Beatriz Galindo fellowship (4 years, November 2019–October 2023)
- Josef Hlávka prize www.hlavkovanadace.cz/cinnost_2018.php
- Best Young Researcher of Czech Acad. of Sciences www.avcr.cz/en/about-us/awards/prizes-of-the-cas/
- Best PhD Thesis award of the University of Barcelona
- CAS-ICS postdoctoral fellowship (2 years, June 2017–June 2019)
- APIF Scholarship of the University of Barcelona (3 years)

Invited and plenary talks (slides available at http://uivty.cs.cas.cz/~moraschini/)

7. The poset of all logics. Invited talk at TACL 2019, Nice, France, 2019.
6. On interpretations between propositional logics. Invited talk at BLAST2019, Boulder, Colorado, 2019.
5. Relational semantics, ordered algebras, and quantifiers for deductive systems. Invited talk at LATD2018, Bern, Switzerland, 2018.
4. Varieties of De Morgan monoids and axiomatic extensions of Relevance Logic. Invited speaker at the First Algebra Week, Siena, Italy, 2018.
3. A course in Abstract Algebraic Logic. Invited tutorial at TACL School 2017, Olomouc, Czech Republic, 2017.
2. Classifying Strongly Finite Logics in the Leibniz Hierarchy. Invited talk at the 16th SLALM, Buenos Aires, Argentina, 2014.
1. Logics associated with a quasi-primal algebra. Plenary talk at AAA88, Warsaw, Poland, 2014.

Grants (principal investigator)

- *Enhancing human resources in theoretical computer science* (2 years, May 2018–April 2020), Funded by the Operational Programme Research, Development and Education

Grants (team member)

- *Predicate graded logics and their applications in computer science* GA17-04630S of the GAČR 2017-2019
- *Totally ordered monoids* 15-07724Y of the Czech Science Foundation, 2015-2017
- *SYSMICS*, 689176 of Horizon 2020 Marie Skłodowska-Curie RISE, 2016–2018
- *Modelling vague quantifiers in mathematical fuzzy logic*, joint project of Austrian Science Fund I1897-N25 and Czech Science Foundation GF15-34650L, 2015–2018
- *Center of Excellence-Institute for Theoretical Computer Science* (CE-ITI), GBP202/12/G061 of the Czech Science Foundation, 2012–2018
- *An Order-Based Approach to Non-Classical Propositional and Predicate Logics*, GA13-14654S of the Czech Science Foundation, 2013–2016
- *Algebraic Logic and Non-Classical Logics*, MTM2011-25747 of the Government of Spain
- *Research grant*, 2009SGR-1433 of the research funding agency AGAUR of the Generalitat de Catalunya

Distinguished professional activities

- Member of the program committee of LATD 2020 https://www.logic.at/latd2020/
- Chair of program/organizing committee of WARU 2019 http://uivty.cs.cas.cz/~moraschini/waru2019/
- Supervisor of the PhD. student J.J. Wannenburg (in collaboration with J.G. Raftery)
- Opponent in Tomáš Lávička's PhD dissertation defence
- Member of the organizing committee of TACL 2017 http://www.cs.cas.cz/tacl2017/

Teaching experience

- *Introduction to logic* (associate professor), University of Barcelona, 2016
- *Introduction to logic* (associate professor), University of Barcelona, 2015.

Stays abroad

- Faculty of Philosophy of the University of Barcelona (January–March 2019)
- Department of Mathematics of University of Pretoria (November 2018)
- Faculty of Philosophy of the University of Barcelona (January–February 2018)
- Department of Mathematics of University of Pretoria (September–October 2017)
- Faculty of Philosophy of the University of Barcelona (January–February 2017)
- Institute of Theory of Information and Automation of the Czech Academy of Sciences (May 2016)
- Department of Mathematics of University of Pretoria (November–December 2015)
- Institute of Theory of Information and Automation of the Czech Academy of Sciences (July 2015)
- Department of Mathematics of University of Pretoria (January–February 2015)

Journal papers

20. R. Jansana and T. Moraschini. The poset of all logics III: finitely presentable logics. To appear in *Studia Logica*, 2019.
19. T. Moraschini, J.G. Raftery, J. Wannenburg. Epimorphisms in varieties of square-increasing residuated structures. To appear in *Algebra Universalis*, 2019.
18. T. Moraschini, J.G. Raftery, and J.J. Wannenburg. Singly generated quasivarieties and residuated structures. To appear in the *Mathematical Logic Quarterly*, 2019.
17. T. Moraschini. Varieties of positive modal algebras and structural completeness. Published online in the *Review of Symbolic Logic*. DOI: 10.1017/S1755020319000236, 2019.
16. T. Moraschini and J.G. Raftery. On prevarieties of logic. Published online in *Algebra Universalis*, DOI:10.1007/s00012-019-0611-7, 2019.
15. T. Moraschini, J.G. Raftery and J.J. Wannenburg. Varieties of De Morgan monoids: covers of atoms. Published online in the *Review of Symbolic Logic*. DOI: 10.1017/S1755020318000448, 2019.
14. T. Moraschini, J.G. Raftery and J.J. Wannenburg. Epimorphisms, definability and cardinalities. Published online in *Studia Logica*. DOI: 10.1007/s11225-019-09846-5, 2019.
13. T. Moraschini. On the complexity of the Leibniz hierarchy. *Annals of Pure and Applied Logic*. 170(7):805-824, 2019.
12. P. Cintula, J. Gil-Férez, T. Moraschini and F. Paoli. An abstract approach to multiset consequence relations. *Review of Symbolic Logic*. 12(2):331-371, 2019.

11. T. Moraschini, J.G. Raftery and J.J. Wannenburg. Varieties of De Morgan monoids: minimality and irreducible algebras. *Journal of Pure and Applied Algebra*, 223(7):2780-2803, 2019.
10. T. Moraschini. A logical and algebraic characterization of adjunctions between generalized quasi-varieties. *Journal of Symbolic Logic*, 83(3):899-919, 2018.
9. T. Moraschini. A Study of the Truth Predicates of Matrix Semantics. *Review of Symbolic Logic*, 11(4):780–804, 2018.
8. T. Moraschini. A computational glimpse to the Leibniz and Frege hierarchies. *Annals of Pure and Applied Logic*, 169(1):1-20, 2018.
7. G. Bezhanishvili, T. Moraschini and J. Raftery. Epimorphisms in Varieties of Residuated Structures. *Journal of Algebra*, 492:185-211, 2017.
6. T. Moraschini. The Semantic Isomorphism Theorem in Abstract Algebraic Logic. *Annals of Pure and Applied Logic*, 167(2):1298-1331, 2016.
5. T. Moraschini. On Everywhere Strongly Logifiable Algebras. *Reports on Mathematical Logic*, 50:83-107, 2015.
4. J.M. Font and T. Moraschini. M-Sets and the Representation Problem. *Studia Logica*, 103(3):21-51, 2015.
3. J.M. Font and T. Moraschini. A Note on Congruences of Semilattices with Sectionally Finite Height. *Algebra Universalis*, 72(3):287-293, 2014.
2. J.M. Font and T. Moraschini. Logics of Varieties, Logics of Semilattices, and Conjunction. *Logic Journal of the IGPL*, 22:818-843, 2014.
1. T. Moraschini. An Algebraic Study of Exactness in Partial Contexts. *International Journal of Approximate Reasoning*, 55:457–468, 2014.

Conference papers

2. R. Horčík, T. Moraschini and A. Vidal. An algebraic approach to the valued constraint satisfaction problem. In proceedings of Computer Science in Logic 2017.
1. J.M. Font and T. Moraschini. On the Logics Associated With a Given Variety of Algebras. In proceedings of Trends in Logic XIII, 67-80, 2014.

Book chapters

1. H. Albuquerque, J. M. Font, R. Jansana and T. Moraschini. Truth-Equational Logics, Full Models, and the Frege Hierarchy. In J. Czelakowski, editor, *Don Pigozzi on Abstract Algebraic Logic and Universal Algebra*, Outstanding Contributions to Logic, Springer-Verlag, 16:53-79, 2018.

Submitted manuscripts (all available at http://uivty.cs.cas.cz/~moraschini/)

4. T. Moraschini and J.J. Wannenburg. Epimorphism surjectivity in varieties of Heyting algebras.
3. R. Jansana and T. Moraschini. The poset of all logics II: Leibniz classes and hierarchy.
2. R. Jansana and T. Moraschini. The poset of all logics I: Interpretations and lattice structure.
1. S. Bonzio, T. Moraschini and M. Pra Baldi. Logics of left variable inclusion and Plonka sums of matrices.

Work in progress

- G. Bezhanishvili, N. Bezhanishvili and T. Moraschini. Profinite Heyting algebras and profinite completions.
- N. Bezhanishvili and T. Moraschini. Citkin's characterizaton of hereditarily structurally complete intermediate logics via Esakia duality.
- R. Jansana and T. Moraschini. The poset of all logics IV: irreducible elements.
- R. Jansana and T. Moraschini. Relational semantics and ordered algebras for deductive systems. Book.

Softwares

- Leibniz classifier, with A. Vidal http://uivty.cs.cas.cz/~amanda/publications.html