

# Marta Fiori Carones

## Curriculum Vitae

### PERSONAL DATA

Birth: 5/12/1991, Italy  
Nationality: Italian  
Web page: <https://martaforicarones.github.io>  
Email: [marta.fioricarones@outlook.it](mailto:marta.fioricarones@outlook.it)  
Address: Institute of Mathematics  
University of Warsaw  
Banacha 2  
02-097 Warszawa, Poland

### CURRENT POSITION

Postdoctoral fellow at the Institute of Mathematics, University of Warsaw

### AREAS OF INTERESTS

Mathematical logic, reverse mathematics, foundations of mathematics, computability theory, philosophy of mathematics

### EDUCATION

- 2016-2020 PhD in Mathematics, Università degli Studi di Udine,  
Dissertation: “Filling cages. Reverse mathematics and combinatorial principles”  
Supervisor: Prof. Alberto Marcone
- 2014-2016 MA (with distinction) in Philosophy, Università degli Studi di Milano  
Dissertation: “Il teorema di Tennenbaum e i modelli dell’aritmetica” (Tennenbaum’s Theorem and Models of Arithmetic)  
Advisors: Prof. Silvio Bozzi, Prof. Edoardo Ballo
- 2010-2014 BA (with distinction) in Philosophy, Università degli Studi di Milano  
Dissertation: “Oggetti e strutture: diverse prospettive sui numeri naturali” (Structures and Objects: different perspectives on natural numbers)  
Advisor: Prof. Edoardo Ballo

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Last updated: September 2021

## EMPLOYMENT

- 10.2021-12.2023    Researcher  
Sobolev institute of mathematics, Novosibirsk
- 09.2020-08.2021    Postdoctoral fellow  
Institute of Mathematics, University of Warsaw
- 01-06.2020    Research assistant  
Munich Center for Mathematical Philosophy, LMU Munich

## INVITED TALKS

- 09.2021    *The epistemological reading of reverse mathematics through an example*  
Workshop in Philosophy of Computing  
Politechnika Warszawska, online
- 07.2021    *An algorithm for reorienting infinite pseudo-transitive graphs*  
Computability and Complexity in Analysis, Universität der Bundeswehr München,  
online
- 05.2021    *A characterisation theorem for uniquely orderable interval graphs*  
filoLOGICA, Università degli Studi di Bologna, online
- 02.2021    *The strength of ADS and CAC in the absence of  $\Sigma_1^0$ -induction*  
South Eastern Logic Symposium 2021, online
- 05.2020    *A theorem from Rival and Sands and reverse mathematics*  
Online seminar on Computability Theory and Applications
- 03.2020    *(Extra)ordinary equivalences with ADS*  
ASL North American Meeting, special session on reverse mathematics and com-  
putability theory of Ramsey-theoretic principles (cancelled)

## CONTRIBUTED TALKS

- 07.2021 *Measuring the strength of Ramsey-theoretic statements over  $RCA_0^*$*   
Logic Colloquium 2021, Poznan, online
- 07.2021 *Transitive reorientations of pseudo-transitive infinite graphs*  
Computability in Europe 2021, Ghent, online
- 05.2020 *Unique orderability of infinite interval graphs and reverse mathematics*  
Logic seminars, Università di Udine, online
- 12.2019 *An on-line algorithm to reorient pseudo-transitive graphs*  
informal Formal Methods Meetings, Università di Udine
- 08.2019 *A theorem of ordinary mathematics equivalent to ADS*  
16th International Congress on Logic, Methodology and Philosophy of Science and Technology, Prague
- 07.2019 *Reverse mathematics of a theorem about posets of finite width*  
Computability in Europe 2019, Durham
- 03.2019 *Catching the strength of a theorem about chains with nice properties in posets of finite width*  
Proofs, Constructions, and Computations Seminar, University of Leeds
- 08.2018 *The reverse mathematics of a theorem about subgraphs with nice properties*  
Computability in Europe 2018, Kiel
- 07.2018 *The strength of a theorem about subgraphs with nice properties*  
Logic Colloquium 2018, Udine
- 02.2018 *On the adjacency of vertices to the vertices of an infinite subgraph*  
Postgraduate Logic Seminar, University of Leeds
- 01.2018 *Interval graphs and reverse mathematics*  
Proofs, Constructions, and Computations Seminar, University of Leeds
- 10.2017 *Interval graphs and reverse mathematics*  
Forth Symposium on the Foundations of Mathematics, Munich

## PUBLICATIONS

- 2021 Marta Fiori-Carones, Paul Shafer, Giovanni Soldà, An inside-outside Ramsey theorem and computability theory (to appear in Transactions of the American Mathematical Society)
- 2021 Marta Fiori-Carones, Alberto Marcone, Paul Shafer, Giovanni Soldà, (Extra)ordinary equivalences with the ascending/descending sequence principle (submitted)
- 2021 Marta Fiori-Carones, Leszek Aleksander Kołodziejczyk, Katarzyna W. Kowalik, Weaker cousins of Ramsey's theorem over a weak base theory (to appear in Annals of Pure and Applied Logic)
- 2021 Marta Fiori-Carones, Alberto Marcone, To reorient is easier than to orient: an on-line algorithm to reorient pseudo-transitive graphs, *Computability* 10, pp. 215-233
- 2021 Marta Fiori-Carones, Alberto Marcone, Uniquely orderable interval graphs (submitted)
- 2020 Marianna Antonutti Marfori, Marta Fiori-Carones, Intensional aspects of computability theory (in preparation)

## GRANTS

- 2019 ASL, travel grant for Logic Colloquium 2019, Prague
- 2019 ASL, travel grant for Computability in Europe 2019, Durham
- 2018 Women in Computability, travel grant for Computability in Europe 2018, Kiel
- 2018 ASL, travel grant for Computability in Europe 2018, Kiel
- 2018 National University of Singapore, Graduate Summer School in Logic organised by IMS (Institute for Mathematical Sciences)
- 2018 ASL, travel grant for the conference "Ramsey's theory and computability", Rome
- 2017 AILA, XXVI Incontro AILA (Italian Association for Logic and Applications)
- 2017 ASL, travel grant for Logic Colloquium 2017, Stockholm
- 2017 Scandinavian Logic Society, Third Nordic Logic Summer School, Stockholm
- 2015 AILA, AILA Summer School of Logic
- 2-7.2015 Erasmus Placement, Department of Logic, History and Philosophy of Science, Universitat de Barcelona
- 2013 AILA, AILA Summer School of Logic

## SUMMER SCHOOLS

- 2018 IMS Graduate Summer School in Logic, National University of Singapore
- 2017 Third Nordic Logic Summer School, University of Stockholm
- 2015 Logic Summer School organized by AILA (Italian Association for Logic and Applications)
- 2014 Logic Summer School organized by AILA
- 2013 Logic Summer School organized by AILA
- 2012 International Summer School in Cognitive Sciences and Semantics, University of Latvia

## RESEARCH VISITS

- 01-03.2018 School of Mathematics, University of Leeds
- 01-05.2019 School of Mathematics, University of Leeds

## TEACHING EXPERIENCES

- 05-06.2019 Teaching assistant for the course of Linear Algebra,  
BA degree in Internet of things and big data, Università di Udine, 12 hours
- 10-11.2018 Teaching assistant for the course of Principles of Mathematics,  
BA degree in Internet of things and big data, Università di Udine, 12 hours
- 05-06.2018 Teaching assistant for the course of Linear Algebra,  
BA degree in Internet of things and big data, Università di Udine, 12 hours
- 10-11.2017 Teaching assistant for the course of Principles of Mathematics,  
BA degree in Internet of things and big data, Università di Udine, 12 hours

## MISCELLANEOUS

- 2018 Collector for Report of Dagstuhl Seminar "Measuring the Complexity of Computational Content: From Combinatorial Problems to Analysis"  
2018 Member of local organizing committee of Logic Colloquium 2018

## AFFILIATIONS

Associazione Italiana di Logica e sue Applicazioni, AILA  
Association for Symbolic Logic, ASL  
Computability in Europe, CiE

## LANGUAGES

Italian	Mother tongue
English	Fluent
French	Good
Spanish	Good

## REFERENCES

Leszek Kołodziejczyk, Uniwersytet Warszawski	lak@mimuw.edu.pl
Alberto Marcone, Università di Udine	alberto.marcone@uniud.it
Paul Shafer, University of Leeds	p.e.shafer@leeds.ac.uk