Marta Fiori Carones

Curriculum Vitae

PERSONAL DATA

Birth: 5/12/1991, Italy

Nationality: Italian

Web page: https://martafioricarones.github.io Email: marta.fioricarones@outlook.it Address: Sobolev Institute of Mathematics

4 Acad. Koptyug Avenue 630090 Novosibirsk, Russia

CURRENT POSITION

Postdoctoral fellow at the Sobolev Institute of Mathematics, Novosibirsk

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" (Tennen-

baum'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" (Struc-

tures and Objects: different perspectives on natural numbers)

Advisor: Prof. Edoardo Ballo

Last updated: December 2021

EMPLOYMENT

10.2021-12.2023 Postdoctoral fellow

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

PUBLICATIONS

- 2021 Marta Fiori-Carones, Leszek Aleksander Kołodziejczyk, Tin Lok Wong, Keita Yokoyama, An isomorphism theorem for models of Weak König's Lemma without primitive recursion (in preparation)
- 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, Annals of Pure and Applied Logic 172, pp. 103028
- 2021 Marta Fiori-Carones, Alberto Marcone, To reorient is easier than to orient: an online 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)

INVITED TALKS

- 10.2021 Different behaviour of CRT_2^2 and COH over RCA_0* Università di Udine
- 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 Σ_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 computability theory of Ramsey-theoretic principles (cancelled)

CONTRIBUTED TALKS

| CONTILIDO | TED THERE |
|------------|--|
| 11-12.2021 | A short introduction to reverse mathematics |
| | Mini course at Computability theory seminars, Sobolev Institute of Mathematics |
| 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 |
| 02010 | Computability in Europe 2019, Durham |
| 03.2019 | Catching the strength of a theorem about chains with nice properties in posets of |
| 0012020 | finite width |
| | Proofs, Constructions, and Computations Seminar, University of Leeds |
| 08.2018 | The reverse mathematics of a theorem about subgraphs with nice properties |
| 00.2020 | 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 |
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| RESEARCH | I VISITS |
| 09-2021 | Dipartimento di scienze matematiche, informatiche e fisiche, Università di Udine |
| 01-03.2018 | School of Mathematics, University of Leeds |
| 01-05.2019 | School of Mathematics, University of Leeds |
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| TEACHING | FYDEDIENCES |
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TEACHING EXPERIENCES

| 05-06.2019 | Teaching assistant for the course of Linear Algebra, |
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| | 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

- 2021 How to keep a child extremely busy with crayons and paper
 Filkina Medal Award, Mathematical Center in Akademgorodok (Novosibirsk State
 University)
- 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

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

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

 $Leszek\ Kołodziejczyk,\ Uniwersytet\ Warszawski \quad lak@mimuw.edu.pl$ Alberto Marcone, Università di Udine Paul Shafer, University of Leeds

alberto.marcone@uniud.itp.e.shafer@leeds.ac.uk