Academic curriculum vitae

Personal Data

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Employment

September 2023– Assistant professor

Institute of Mathematics
The Polish Academy of Sciences

2021–August '23 Postdoctoral fellow

Institute of Computer Science (Ústav informatiky)

The Czech Academy of Sciences

Gaps in employment is due to travel restrictions from the COVID-

19 pandemic.

Education

December 2020 Ph.D. in Logic and the Methodology of Science

University of California, Berkeley

Thesis: Duality for Boolean Algebra Expansions and Its Applica-

tions

(includes an 8-month medical leave in 2018)

December 2015 M.A. in Mathematics

University of California, Berkeley

Examination topic: Higher recursion theory, especially the theory

of Π_1^1 sets

March 2014 B.Sc. in Information Science

The University of Tokyo, Japan

Thesis: Algorithmic Randomness and Computational Complexity

Graduate Student Instructorship at UC Berkeley

Summer2020 MATH 55 (Discrete Mathematics)

I taught as the lead instructor of this course.

Spring2020 Math 54 (Linear Algebra and Differential Equations)

Fall2019 MATH 113 (Introduction to Abstract Algebra)

Spring2018 MATH 104 (Introduction to Analysis)
Summer2017 PHILOS 12A (Introduction to Logic)

Spring2017 MATH 54 (Linear Algebra and and Differential Equations)

Other teaching experience

Fall2016 Direct Reading Program

(mentorship program for an undergraduate studying *Turing Computability: Theory and Applications* by Soare), UC Berkeley

April–July 2014 Teaching Assistant (Linear Algebra), Kyoto University

Fall 2022— Informal supervision

weekly meetings with Ph.D. students at Charles University in

Prague and University of Warsaw

Refereed journal papers

[2023a]	T. Moraschini, J.J. Wannenburg, and K. Yamamoto. "Elemen-
	tary Equivalence in Positive Logic Via Prime Products". In: The
	Journal of Symbolic Logic (2023). 10.1017/jsl.2023.50, pp. 1–15.

[2023b] K. Yamamoto. "The Small Index Property of the Fraïssé Limit of Finite Heyting Algebras". In: *Journal of Algebra* 628 (2023), pp. 382–391

[2022a] K. Yamamoto. "The Automorphism Group of the Fraïssé Limit of Finite Heyting Algebras". In: *The Journal of Symbolic Logic* 88.3 (2023), pp. 1310–1320. [Addendum: K. Yamamoto. "The Automorphism Group of the Fraïssé Limit of Finite Heyting Algebras—Addendum". In: *The Journal of Symbolic Logic* 88.3 (2023), pp. 1321–1322]

[2022b] J. McDonald and K. Yamamoto. "Choice-Free Duality for Orthocomplemented Lattices by Means of Spectral Spaces". In: Algebra Universalis 83 (2022)

[2020] K. Yamamoto. "Correspondence, Canonicity, and Model Theory for Monotonic Modal Logics". In: *Studia Logica* 109.2 (2020), pp. 397–421

[2017] K. Yamamoto. "Results in Modal Correspondence Theory for Possibility Semantics". In: *Journal of Logic and Computation* 27.8 (2017), pp. 2411–2430

Anonymous Reviews

Journal of Algebra, Journal of Symbolic Logic, Young Philosophy 2022 (Slovak Academy of Sciences), Journal of Philosophical Logic, Review of Symbolic Logic, Logical Methods in Computer Science, Synthese, Advances in Modal Logic

Awards and Scholarships

2021 Research Fellowship for Young Researchers: PD (offered, did

not accept)

Japan Society for Promotion of Science

2014–2018 Overseas Study Scholarship

Takenaka Scholarship Foundation

2013 6th place (tie), International Collegiate Programming Contest,

Asia Regional in Aizu

Association for Computing Machinery

List of presentations at scientific conferences in the field

March 2024 A logic for compact structures (Invited).

Seminar on General Algebra at Faculty of Mathematics and

Information Science, Warsaw University of Technology.

October 2023 Elementary equivalence in positive logic via prime products.

Conference on Generic Structures, Poznań, Poland.

(joint work with Tommaso Morachini and Johann J. Wannen-

burg)

July 2023 Elementary equivalence in positive logic via prime products.

Logic Colloquium 2023, Milan, Italy.

(joint work with Tommaso Morachini and Johann J. Wannen-

burg)

May 2023 How to compute uniform interpolants semantically (Tutorial).

Seminar on Applied Mathematical Logic, Prague, the Czech

Republic.

January 2023 Order expansions of finite Heyting algebras (Invited).

Drafting Workshop in Discrete Mathematics and Probability

2023, Budapest, Hungary.

January 2023 Generalized ultraproducts for positive logic.

British Postgraduate Model Theory Conference 2023, Leeds, the

United Kingdom.

(joint work with Tommaso Morachini and Johann J. Wannen-

burg)

September 2022 Generalized ultraproducts for positive logic.

LOGICA 2022, Teplá, the Czech Republic.

(joint work with Tommaso Morachini and Johann J. Wannen-

burg)

June 2022 The small index property of the Fraïssé limit of finite Heyting

algebras.

Logic Colloquium 2022, Reykjavik, Iceland.

June 2022 The small index property of the Fraïssé limit of finite Heyting

algebras.

Topology, Algebras and Categories in Logic 2022, Coimbra,

Portugal.

June 2022 The small index property of the Fraïssé limit of finite Heyting

algebras.

Czech Gathering of Logicians 2022, Prague, the Czech Republic.

December 2021 The automorphism group of the Fraisse limit of finite Heyting

alaebras

Beginning Logicians' Meeting 2022, Kôbe, Japan (in Japanese).

September 2021 Choice-free duality for ortholattices by means of spectral spaces.

LOGICA 2021, Hejnice, Czechia.

(joint work with Joseph McDonald at University of Alberta)

June 2021	The automorphism group of the Fraisse limit of finite Heyting algebras. BLAST 2021, Las Cruces, New Mexico.
June 2021	The automorphism group of the Fraisse limit of finite Heyting algebras. Kurt Gödel Day 2021 & Czech Gathering of Logicians 2021, Brno, Czechia.
April 2021	The automorphism group of the Fraïssé limit of finite Heyting algebras (Invited) Logic Seminar, Department of Mathematics, University of Florida.
June 2019	Correspondence, canonicity, and model theory for monotonic modal logics Topology, Algebra, and Categories in Logic 2019, Nice, France.
May 2019	Correspondence, canonicity, and model theory for monotonic modal logics BLAST 2019, Boulder, Colorado
June 2017	Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics Topology, Algebra, and Categories in Logic 2017, Prague, the Czech Republic (joint work with Zhiguang Zhao at Delft University of Technology)
April 2017	Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics Algebra and Coalgebra meet Proof Theory VIII, Glasgow, Scotland (joint work with Zhiguang Zhao at Delft University of Technology)
December 2016	Algorithmic Correspondence, Canonicity and Completeness for Possibility Semantics The 8th International Workshop on Logic and Cognition: Non-classical Logics and Their Applications, Guangzhou, China (joint work with Zhiguang Zhao at Delft University of Technology)
January 2016	Modal Correspondence Theory for Possibility Semantics The 50th MLG Workshop, Kyôto, Japan.
July 2014	On the Computational Power of Algorithmically Random Constants in Blum-Shub-Smale Machines Computability and Complexity in Analysis 2014, Darmstadt, Germany (joint work with Dr. Akitoshi Kawamura at the University of

References

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