# Curriculum Vitae: Yurii Khomskii

### PERSONAL INFORMATION

Name: Yurii Daniilovich Khomskii

Titles: Dr., Privatdozent (Habilitation)

Date of Birth: 5 September 1980

Place of Birth: Moscow, Russia

Nationality: Dutch and Russian

Family situation: Married, two children

Languages: Fluent: English, Russian, German, Dutch, Bulgarian

Conversational: Hebrew

URL: https://www.math.uni-hamburg.de/home/khomskii/

#### **EDUCATION**

18.06.2003 Bachelor performing musician (piano)

Conservatorium Groningen, the Netherlands

18.04.2005 Bachelor Mathematics

University of Leiden

14.08.2007 Master of Logic (cum laude)

Institute of Logic, Language and Computation (ILLC)

University of Amsterdam, the Netherlands

Supervisor: Benedikt Löwe

10.02.2012 PhD

Institute of Logic, Language and Computation (ILLC)

University of Amsterdam, the Netherlands

Supervisor: Benedikt Löwe

### CURRENT POSITION

01.02.2019 – 31.06.2020 Lecturer at Amsterdam University College (AUC), Amsterdam,

01.03.2019 – Permanent connection as *Privatdozent* to Hamburg University, Germany.

# PREVIOUS POSITIONS

01.09.2007 - 15.02.2012	PhD candidate $(Promovendus)$
	Institute of Logic, Language and Computation (ILLC)
	University of Amsterdam, the Netherlands
01.09.2011 - 31.01.2012	Lecturer
	Amsterdam University College (AUC)
01.03.2012 - 28.02.2015	Postdoctoral researcher
	Kurt Gödel Research Center for Mathematical Logic (KGRC)
	University of Vienna
01.03.2015 - 28.02.2017	${\bf Postdoctoral\ researcher\ }({\it Wissenschaftlicher\ Mitarbeiter})$
	Hamburg University, Germany.
01.03.2017 - 28.02.2019	Marie Skłodowska-Curie fellow, Hamburg University, Germany.

### FELLOWSHIPS AND AWARDS

01.09.2007 - 15.02.2012	Mosaic Award 2007: A grant for a four-year period of doctoral re-
	search, awarded by the Netherlands Organisation for Scientific Re-
	search (NWO), aimed at stimulating the participation of ethnic mi-
	norities in academic research.
01.03.2017 - 28.02.2019	Marie Skłodowska-Curie fellowship (University of Hamburg, Ger-
	many), project REGPROP.

# SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2017 - 2019	Co-supervision of 2 Master students in mathematics, University of Hamburg
2019 - 2020	Primary supervision of a Master student, ILLC, Universiteit van Amster-
	dam.

### TEACHING EXPERIENCE

2007 - 2012	PhD Candidate, Amsterdam University (1 lecture "selected topics in set the-
	ory"; 6 classes as teaching assistant)
July 2010	Invited intensive course "Infinite Games", Sofia University, Bulgaria
Fall 2011	Lecturer at Amsterdam University College ("Logic, Information Flow and Ar-
	gumentation")
June 2013	Invited lecturer on game theory at the HIM programme $Stochastic\ Dynamics\ in$
	Economics and Finance, Bonn, Germany (invitation by prof. Igor Evstigneev)
2012 - 2015	Postdoctoral Researcher, Vienna University (lecture "advanced set theory")
2015 - 2016	Wissenschaftlicher Mitarbeiter, Hamburg University (lecture "Vertiefung Men-
	genlehre"; 4 classes as teaching assistant)
2017 - 2018	4 intensive projects in Set Theory, University of Amsterdam
2018 - 2020	Privatdozent, Hamburg University (lecture "Vertiefung Mengenlehre"; several
	"seminars" and "proseminars")
2018 - 2020	Lecturer at Amsterdam University College ("Logic, Information, Arugmenta-
	tion", "Calculus" and "Statistics for Sciences")

# ORGANISATION OF SCIENTIFIC MEETINGS

May 2009	Amsterdam workshop in set theory (main organizer)
June 2010	Amsterdam workshop in set theory (main organizer)
2009-2011	Seminar series Logic Tea, University of Amsterdam (one of three co-
	organizers)
September 2015	Set Theory Workshop at the annual meeting of the Deutsche Mathematiker-
	$Vereinigung\ (DMV),\ Hamburg,\ Germany\ (one\ of\ three\ co-organizers)$
September 2016	$Colloquium\ Logicum\ ($ bi-annual meeting of the German mathematical logic
	society DVMLG), Hamburg, Germany (one of two co-organizers)

# INSTITUTIONAL RESPONSIBILITIES

2011	PhD hiring committee, University of Amsterdam
2013 - 2015	MSc Thesis committee service (6 students), University of Amsterdam
2015 - 2016	Tag der Mathematik, Hamburg University

# SCIENTIFIC REFEREE FOR

- $\bullet\,$  Journal of Symbolic Logic
- Proceedings of the American Mathematical Society
- Archives for Mathematical Logic

- Mathematical Logic Quarterly
- Journal of Applied Non-Classical Logics
- Journal of Dynamics and Games
- CIE 2012, Cambridge, England
- Logic, Computation, Hierarchies, volume 4 of Ontos Mathematical Logic, De Gruyter, (2014)
- Outstanding Contributions to Logic: Jaakko Hintikka, edited by G. Sandu and H. van Ditmarsch (Springer-Verlag).

#### SCIENTIFIC PUBLICATIONS

#### Peer-reviewed:

- Yurii Khomskii, William of Sherwood, singular propositions and the Hexagon of Opposition, Jean-Yves Béziau and Gillman Payette (eds.), New Perspectives on the Square of Opposition, Peter Lang, Bern, 2010.
- 2. Yurii Khomskii, **A general setting for the pointwise investigation of determinacy**, Proceedings of the Third Indian Conference on Logic and Applications, (Eds.) R. Ramanujam and Sundar Sarukkai, Springer LNAI 5378, 2009. pp 187–197.
- 3. Jörg Brendle, Yurii Khomskii, **Polarized partitions on the second level of the projective hierarchy**, Annals of Pure and Applied Logic 163, 2012. pp 1345–1357. (DOI: 10.1016/j.apal.2012.03.003.)
- 4. Jörg Brendle, Yurii Khomskii, Mad families constructed from perfect a.d. families, Journal of Symbolic Logic 78 (4), 2014. pp. 1164-1180. (DOI: 10.2178/jsl.7804070).
- 5. Yurii Khomskii, **Projective Hausdorff gaps**, Archive for Mathematical Logic 53:1-2, 2014. pp 57–64.
- Vera Fischer, Yurii Khomskii, Sy Friedman, Co-analytic mad families and projective wellorders, Archive for Mathematical Logic 52:7-8, 2013, pp 809–822.
- 7. Vera Fischer, Sy Friedman, Yurii Khomskii, Cichoń's diagram, regularity properties and  $\Delta_3^1$  sets of reals, Archive for Mathematical Logic 53:5–6, 2014, pp 695–729.
- 8. Vera Fischer, Sy Friedman, Yurii Khomskii, Measure, category and projective well-orders, Journal of Logic and Analysis 6, Paper 8 (2014) (25 pp).
- Sy Friedman, Yurii Khomskii, Vadim Kulikov, Regularity properties on the generalised reals, Annals of Pure and Applied Logic 167, 2016, pp 408–430.
- Barnabas Farkas, Yurii Khomskii, Zoltán Vydyánszki, Almost disjoint refinements and mixing reals, Fundamenta Mathematicae 242 (2018), pp 25–48.
- Yurii Khomskii, Giorgio Laguzzi, Benedikt Löwe, Ilya Sharankou, Questions on Generalised Baire Spaces, Mathematical Logic Quarterly 62:4-5, August 2016, pp 439–456.

- 12. Yurii Khomskii, Giorgio Laguzzi, Full-splitting Miller trees and infinitely often equal reals, Annals of Pure and Applied Logic 168:8, 2017, pp 1491-1506.
- 13. Jörg Brendle, Yurii Khomskii, Wolfgang Wohofsky, Cofinalities of Marczewski ideals, Colloquium Mathematicum 150 (2017), pp 269–279.
- 14. Yurii Khomskii, **Filter-Laver measurability**, Topology and its Applications, Volume 228 (2017), pp 208–221.
- 15. Jörg Brendle, Vera Fischer, Yurii Khomskii, **Definable maximal independent families**, Proceedings of the AMS, Volume 147: 8 (2019) pp 3547-3557.

#### Submitted:

 Lorenzo Galeotti, Yurii Khomskii, Jouko Väänänen, Bounded Symbiosis and Upwards Reflection.

### In preparation

- 17. Giorgio Laguzzi, Yurii Khomskii, Marlene Koelbing and Wolfgang Wohofsky, Laver trees in the generalized Baire space.
- 18. Yurii Khomskii, Eventually different trees.