Victoria Gitman

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| Research Interests | R | 651 | 2 | rch | In | te | re | sts |
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| Research Interests |
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| Mathematical Logic ☐ Set theory – forcing, large cardinals, and their interactions ☐ Models of Peano Arithmetic – properties of uncountable models |
| Appointments |
| (Some course materials available at: http://boolesrings.org/victoriagitman/teaching) |
| □ Adjunct Lecturer, CUNY Brooklyn College, 2003-2006. □ Undergraduate courses: Precalculus, Calculus I, Calculus II. □ Assistant Professor in Mathematics, CUNY New York City College of Technology, 2007-2013. □ Undergraduate courses: College Algebra, Statistics and Probability, Calculus I, Calculus II, Differential Equations, Linear Algebra. □ Graduate courses: Logic (CUNY Graduate Center). □ Undergraduate research projects in theoretical computer science, chaos theory. □ Visiting Scholar, CUNY Graduate Center, 2014-present. |
| Professional Development |
| □ Ph.D. in Mathematics (supervisor: Joel David Hamkins), CUNY Graduate Center, 2007. □ B.S. in Mathematics (summa cum laude), CUNY Brooklyn College, 2001. |
| Publications |

(PDF available at: http://boolesrings.org/victoriagitman/research)

- 1. E. Carmody, V. Gitman, and M. Habič, Mitchell order for Ramsey and Ramsey-like cardinals, submitted.
- 2. J. Bagaria, V. Gitman, and R. Schindler, Generic Vopěnka's principle, remarkable cardinals, and a weak Proper Forcing Axiom, to appear in Archive for Mathematical Logic.
- 3. V. Gitman and J. D. Hamkins, Open determinacy for class games, Foundations of Mathematics, Logic at Harvard, Essays in Honor of Hugh Woodin's 60th Birthday, Series: Contemporary Mathematics, American Mathematical Society, 2016 (expected).
- 4. G. Fuchs, V. Gitman, and J. D. Hamkins, *Incomparable* ω_I -like models of set theory, to appear in Mathematical Logic Quarterly.
- 5. G. Fuchs, V. Gitman, and J. D. Hamkins, *Ehrenfeucht's Lemma in set theory*, to appear in Notre Dame Journal of Formal Logic.

- 6. Y. Cheng and V. Gitman, *Indestructibility for remarkable cardinals*, **Archive for Mathematical Logic**, vol. 54, no. 7, pp. 961-984, 2015.
- 7. V. Gitman, T. Johnstone, and J. D. Hamkins, *What is the theory ZFC without power set*, **Mathematical Logic Quarterly**, vol. 62, no. 4-5, pp. 391-406, 2016.
- 8. B. Cody and V. Gitman, *Easton's theorem for Ramsey and strongly Ramsey cardinals*, **Annals of Pure and Applied Logic**, vol. 166, no. 9, pp. 934-952, 2015.
- 9. V. Gitman and T. Johnstone, *On ground model definability*, **Infinity**, **Computability**, **and Metamathematics: Festschrift in honour of the 60th birthdays of Peter Koepke and Philip Welch**, Series: Tributes, College publications, London, GB, 2014.
- 10. A. Apter, V. Gitman, and J. D. Hamkins, *Inner models with large cardinal features usually obtained by forcing*, **Archive for Mathematical Logic**, vol. 51, no. 3, pp. 257-283, 2012.
- 11. V. Gitman and J. D. Hamkins, *A natural model of the multiverse*, **Notre Dame Journal of Formal Logic**, vol.51, no. 4, pp. 475-484, 2010.
- 12. V. Gitman and P. D. Welch, *Ramsey like cardinals II*. **Journal of Symbolic Logic**, vol. 76, no. 2, pp. 541-560, 2011.
- 13. V. Gitman, *Ramsey-like cardinals*. **Journal of Symbolic Logic**, vol. 76, no. 2, pp. 519-540, 2011.
- 14. V. Gitman, *Proper and piecewise proper families of reals*. **Mathematical Logic Quarterly** vol 55, no. 5, pp.542-550, 2009.
- 15. V. Gitman, *Scott's Problem for proper Scott sets*. **Journal of Symbolic Logic**, vol. 73, no. 3, pp.845–860, 2008.

Work in Progress

(Some summaries available at: http://boolesrings.org/victoriagitman/research)

- 1. V. Gitman and R. Schindler, *Virtual large cardinals*, in preparation.
- 2. V. Gitman, T. Johnstone, and J. D. Hamkins, *Kelley-Morse set theory and choice principles for classes*, in preparation.
- 3. V. Gitman and T. Johnstone, *Indestructibility for Ramsey and Ramsey-like cardinals*, in preparation.
- 4. V. Gitman and J. D. Hamkins, *A model of Generic Vopěnka's Principle with no remarkable cardinals*, in preparation.

Invited Research Positions

| Visiting researcher, National University of Singapore, Singapore, Fall 2016. |
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| Participant, Workshop on High and Low Forcing, American Institute of Mathematics, |
| San Jose, US, Winter 2016. |
| Visiting Fellow, Mathematical, Foundational and Computational Aspects of the |
| Higher Infinite (HIF) program, Isaac Newton Institute, Cambridge, UK, Fall 2015. |
| Visiting researcher, Bristol University, Bristol, UK, Summer 2008. |

Invited (non-CUNY) Talks

(Some slides/lecture notes available at: http://boolesrings.org/victoriagitman/talks)

| | A set-theoretic approach to Scott's Problem, NSU Logic Seminar, National University of Singapore, Singapore, 2016. |
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| | Generic Vopěnka's Principle, Rutgers Logic Seminar, Rutgers University, New Brunswick, 2016. |
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| | Ehrenfeucht principles in set theory, British Logic Colloquium, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, 2015. |
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| | Introduction to nonstandard models of arithmetic, VCU Analysis, Logic, and Physics Seminar, Virginia Commonwealth University, Richmond, 2015. |
| | Nonstandard models of arithmetic, Blackboard Day 10 , Columbia University, New York, 2015. |
| | <i>Kelley-Morse set theory and choice principles for classes</i> , Symposia on the Foundations of Mathematics II , University of London, London, UK, 2015. |
| | Choice schemes for Kelley-Morse set theory, Colloquium Logicum, Universität der Bundeswehr München, Neubiberg, Germany, 2014. |
| | Incomparable ω_I -like models of set theory, Connecticut Logic Seminar, University of Connecticut, Storrs, 2014. |
| | Indestructibility for Ramsey cardinals, Rutgers Logic Seminar, Rutgers University, New Brunswick, 2012. |
| | A natural model of the multiverse axioms, MIT Logic Seminar , Massachusetts Institute of Technology, Boston, 2010. |
| | Gödel's Proof, Mathematics Research Seminar, US Military Academy, West Point, 2010. |
| | Ramsey-like cardinals, ESI workshop on large cardinals and descriptive set theory, Vienna, Austria, 2009. |
| 0 | Ramsey-like cardinals, Bristol Logic Seminar , Bristol University, Bristol, UK, 2008. Scott's problem for proper Scott sets, Rutgers Logic Seminar , Rutgers University, New Brunswick, 2007. |
| | Scott's problem for proper Scott sets, Association for Symbolic Logic (ASL) Logic Colloquium, Wroclaw, Poland, 2007. |
| ٠ | Scott's Problem for proper Scott sets, Notre Dame Logic Seminar, Notre Dame University, Notre Dame, 2007. |
| | ed CUNY Talks |
| (Some | slides/lecture notes available at: http://boolesrings.org/victoriagitman/talks) |
| | Computable processes can produce arbitrary outputs in nonstandard models, MOPA Seminar, CUNY Graduate Center, New York, 2016. |

CUNY Graduate Center, New York, 2016.

☐ Virtual large cardinals, Set Theory Day (celebrating Joel Hamkins' 50th birthday),

| | <i>Ehrenfeucht principles in set theory</i> , CUNY Logic Workshop , CUNY Graduate Center, New York, 2015. |
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| | Remarkable Laver functions, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2014. |
| | Choice schemes for Kelley-Morse set theory, CUNY Logic Workshop, CUNY Graduate Center, New York, 2014. |
| | Introduction to remarkable cardinals, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2014. |
| | Ramsey cardinals and the continuum funciton, CUNY Logic Workshop, CUNY Graduate Center, New York, 2014. |
| | A Jónsson ω_1 -like model of set theory, CUNY Set Theory Seminar , CUNY Graduate Center, New York, 2013. |
| | Embeddings between ω_1 -like models of set theory, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2013. |
| | <i>Indestructibility for Ramsey Cardinals</i> , CUNY Set Theory Seminar , CUNY Graduate Center, New York, 2013. |
| | Models of ZFC- that are not definable in their set forcing extensions, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2012. |
| | Forcing and gaps in 2°, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2011. |
| | A natural model of the multiverse axioms, CUNY Logic Workshop , CUNY Graduate Center, New York, 2010. |
| | <i>Alpha-iterable cardinals</i> , CUNY Logic Workshop , CUNY Graduate Center, New York, 2009. |
| | On the Gitik-Shelah indestructibility for strong cardinals, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2009. |
| | Standard systems of nonstandard models of Peano Arithmetic, Bronx Community College Mathematics Seminar, CUNY Bronx Community College, 2008. |
| | Ramsey and virtually Ramsey cardinals, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2008. |
| | Weakly compact cardinals are not downward absolute to L, CUNY Set Theory Seminar, CUNY Graduate Center, New York, 2008. |
| | Ramsey-like embeddings, CUNY Logic Workshop, CUNY Graduate Center, New York, 2007. |
| Confe | erences and Seminars organized |
| | Co-organizer of Set Theory Day (http://nylogic.org/set-theory-day) (with Miha Habič and Roman Kossak), 2016. |
| | Co-organizer of the CUNY Set Theory Seminar (with Thomas Johnstone), 2014-15. Co-organizer of the CUNY Set Theory Seminar (with Miha Habič) 2015-present. |
| Addit | tional professional activities |
| | Co-founder (with Joel David Hamkins) of <i>Cantor's Attic</i> , a Wikipedia-style database of current knowledge in large cardinal theory (http://cantorsattic.info). |

| Co-founder (with Roman Kossak) of <i>Peano's Parlour</i> , a Wikipedia-style database of current knowledge in models of Peano Arithmetic and related fields |
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| (<u>http://modelsofpa.info</u>). |
| Blogger (http://boolesrings.org/victoriagitman). |
| Referee for journals including American Mathematical Monthly, Topology and its Applications, Annals of Pure and Applied Logic, Archive for Mathematical Logic, Journal of Symbolic Logic, Fundamenta Mathematicae. |
| Member of oral exam committees at the CUNY Graduate Center: |
| ☐ Brent Cody (2009) |
| ☐ Erin Carmody (2012) |
| ☐ Kameryn Williams (2014) |