Curriculum Vitae – Marisa Gaetz

www.mit.edu/~mgaetz/ ◇ mgaetz@mit.edu

EDUCATION

Massachusetts Institute of Technology *Fall 2020–*
Ph.D. Candidate in Mathematics, advised by David Vogan GPA: 5.0/5.0

Massachusetts Institute of Technology *2016–2020*
B.S. Mathematics and Minor in Philosophy GPA: 4.9/5.0

JOB EXPERIENCE

Research Scientist at Bill & Melinda Gates Foundation Institute for Disease Modeling ..... Jan–March 2024
Adjunct Faculty Member at Georgetown University (Prison and Justice Initiative) 2023–
Co-Founder and President of Brave Behind Bars, Inc. (computer education for incarcerated people) ... 2021–

SELECTED AWARDS

MIT Mathematics Award for Service to the Math Community 2022
George Lusztig PRIMES Mentorship for Exceptional Mentor Service 2022
MLK Jr. Leadership Award 2021
NSF Graduate Research Fellowship 2020
Fannie & John Hertz Fellowship 2020
Alice T. Schafer Mathematics Prize Honorable Mention 2020

SELECTED PAPERS

- Disconnected reductive groups (with D. A. Vogan, Jr.), *J. Lie Theory* **34** (2024) 2, 469–480.
- From Prisons to Programming: Fostering Self-Efficacy via Virtual Web Design Curricula in Prisons and Jails (with M. Nisser et al.), *Proceedings of the ACM CHI Conference* (2024) 1–13.
- Dual pairs in complex classical groups and Lie algebras. `arXiv:1910.07592` (2024).
- Anti-power j-fixes of the Thue-Morse word, *Discrete Math. Theor. Comput. Sci.* **23** (2021) 1.
- Enumeration and extensions of word-representants (with C. Ji), *Discrete Appl. Math.* **284** (2020).
- Quantifying CDS sortability of permutations by strategic pile size (with B. Flanagan et al.), *Discrete Math. Algorithms Appl.* **12** (2020) 1.
- Support equalities among ribbon Schur functions (with W. Hardt and S. Sridhar), *Electron. J. Combin.* **26** (2019) 3, `P3.52`.

SELECTED SERVICE & TEACHING

Coordinator of MIT's PRIMES Circle mathematics program for high school students ..... 2021 –
Head of The Educational Justice Institute's Computer Education Committee ..... 2020 –
Member of MIT Math Dept.'s Diversity and Community Building Committee ..... 2018 –
Organizer of MIT's Pure Math Graduate Student Seminar ..... 2021 – 2022
Mathematics Mentor for MIT's Directed Reading Program ..... Jan. 2021

OTHER EXPERIENCE

AMSI-MSRI Winter School: *New Directions in Representation Theory* ..... Summer 2022
MIT Undergraduate Research Opportunities Program: *Representation Theory* ..... 2019 – 2020
University of Minnesota Duluth REU: *Combinatorics on Words* ..... Summer 2018
University of Minnesota Twin Cities REU: *Algebraic Combinatorics* ..... Summer 2017

LANGUAGES

- **Programming/Markup**: LaTeX, Python, HTML, CSS, JavaScript, SQL