David Marcil

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Education

2019 – present **Ph.D., Columbia University**
Mathematics, Algebraic Number Theory.
Thesis title: *p-adic L-functions for P-ordinary Hida families on unitary groups.*
Expected graduation date : May 2024

2016 – 2019 **B.Sc., McGill University**
Honours Mathematics, Minor in Computer Science.
Graduation date : May 2019

Research Publications

Journal Articles

1. D. Marcil, "Numerical verification of a conjecture of Harris and Venkatesh," *Journal of Number Theory*, vol. 221, 2021, p. 484-495.

Preprints

1. D. Marcil, "Bushnell-Kutzko types for P-ordinary automorphic representations on unitary groups," Preprint available at arxiv:2310.09110, Oct. 2023.
2. D. Marcil, "p-adic zeta integrals on unitary groups via Bushnell-Kutzko types," Preprint available at arxiv:2311.05466, Nov. 2023.

Teaching

Summer 2023 Calculus III

Spring 2022 College Algebra and Analytic Geometry (Pre-Calculus)

Miscellaneous Experience

Seminars.

2023 **Student Number Theory seminar** on p-adic modular forms and p-adic L-functions

2022 **Student Number Theory seminar** on higher Hida Theory
Co-organized with Michele Fornea.

2021 **Student Number Theory seminar** on p-adic automorphic forms on Shimura varieties

Student Number Theory seminar on Eigenvarieties

Invited Research Talks.

2023 Princeton University, Monodromy and Its Applications (Pre-workshop for Junior Researchers), December 2023: *Eisenstein measures for P-ordinary representations on unitary groups*