

Colton Griffin

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 🔗 <https://coltongrif.github.io>

Education

University of Pennsylvania <i>PhD in Mathematics</i>	<i>Aug 2023 – May 2028</i>
<ul style="list-style-type: none"> ◦ Coursework: Complex algebraic geometry, algebraic geometry, mathematical physics, Brauer groups and Azumaya algebras, moduli spaces of curves 	
Purdue University <i>BS in Mathematics and Physics</i>	<i>Aug 2019 – May 2023</i>

Research Interests

Vertex operator algebras, derived algebraic geometry, moduli spaces of varieties

Awards and Honors

Goldwater Scholarship	<i>2023</i>
NSF Graduate Research Fellowship	<i>2023-2028</i>

Publications

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- [1] Griffin C., *Cohomological vertex algebras*, Preprint available upon request.
 - [2] Christiansen T. J., Datchev K. R., and Griffin C., *Persistence and disappearance of negative eigenvalues in dimension two*, Journal of Spectral Theory (2024), first published online.
 - [3] M. Eltolfa, X. Wang, Griffin C., and F. Robicheaux, *Simulations of classical three-body thermalization in one dimension*, Phys. Rev. E **110** (2024), 014114.
 - [4] Araiza R., Griffin C., and Sinclair T., *An index for inclusions of operator systems*, Journal of Operator Theory **91** (2024), 567-593.
 - [5] Araiza R., Khilnani A., Griffin C., and Sinclair T., *Approximating projections by quantum operations*, Linear Algebra and its Applications **663** (2023), 178-199.
 - [6] Griffin C. and Cui S.X., *Constructing approximately diagonal quantum gates*, International Journal of Quantum Information **20** (2022), no. 08.

Teaching

Teaching Assistant <i>University of Pennsylvania</i>	<i>Fall 2023</i>
<ul style="list-style-type: none"> ◦ Taught/graded for Math 3610 Advanced Calculus 	

Talks

“Cohomological Vertex Algebras,” Math-Physics Joint Seminar	<i>Nov 2024</i>
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