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Curriculum Vitae
Phillip Oscar Williams

Associate Professor of Mathematics
The King's College
56 Broadway, New York, NY, 10004
Phone: (347)-277-3926
Email: philwill@gmail.com
LinkedIn: phillip-williams-tkc

Education

Ph.D. Mathematics, *The Graduate Center of the City University of New York*, May 2011. Thesis: The Minimal Resultant and Conductor for Self Maps of the Projective Line.

BA. **Mathematics, Philosophy**, *Lehigh University*, 2004.

Positions

Associate Professor, The King's College (New York, NY), 2017-Present.

Assistant Professor, The King's College (New York, NY), 2011-2017.

Research Training Group Fellow, The Graduate Center of the City University of New York (New York, NY), 2008-2011.

Graduate Teaching Fellow, Borough of Manhattan Community College (New York, NY), 2005-2008.

Adjunct Lecturer, The City College of New York (New York, NY), Summer 2007.

Adjunct Lecturer, Brooklyn College (Brooklyn, NY), Summer 2006.

Courses Taught

The King's College

Quantitative Reasoning
Calculus

Pre-Calculus
College Algebra with Precalculus
Calculus 2
Statistics
Linear Algebra
Finite Math for Business
Discrete Math with Python

Online:

Quantitative Reasoning
Pre-Calculus
College Algebra with Pre-Calculus

Borough of Manhattan Community College

College Algebra
Arithmetic

Brooklyn College

Geometry for High School Mathematics Teachers

City College

Math 80 (Gateway college preparation course)

Research Interests

Number Theory, Algebraic Geometry, and Algebraic and Arithmetic Dynamics.

Research Papers

Resultant and Conductor of Geometrically Semi-stable Self Maps of the Projective Line Over a Number Field or Function Field, with L. Szpiro and M. Tepper. Publicacions Matemàtiques. Volume 58, Number 2 (2014), 295-329.

Semi-stable Reduction Implies Minimality of the Resultant, with L. Szpiro and M. Tepper. Journal of Algebra, Volume 397, January 2014, Pages 489-498.

Automorphism Loci for the Moduli Space of Rational Maps, with N. Miasnikov and B. Stout. Acta Arithmetica, Volume 180, no. 3, pages 267-296. August 2017.

Iteration and the Minimal Resultant, with K. Jacobs. New York Journal of Mathematics, Volume 25, pages 451-466. 2019.

Writings for a General Audience

Mathematics for its Own Sake. Academic Questions. September 2017.

How to Become Good at Math. November 2018. Written for student success blog at The King's College.

University Service

Committees

2011-2012: Omnibus Committee. History Hiring Committee.
2012-2013: Curriculum Committee. Economics Hiring Committee.
2013-2014: Curriculum Committee. Middle-states self-study committee for standards 9 and 10.
2014-2015: Student Affairs Committee. Enrollment Management Committee. Economics Hiring Committee.
2015-2018: First Year Student Academic Experience Committee.
2019-present: Faculty Development Committee
2021-present: Middle States self-study Steering Committee
2022-present: Middle States Standard IV Committee

Curriculum

Developed *Quantitative Reasoning*.
Developed *Finite Math for Business*.
Proposed and developed *College Algebra and Pre-Calculus.*
Created a math placement exam for the college.
Restructured the common core math offerings for each major.

Developed online versions of *College Algebra and Pre-Calculus, Calculus,* and *Finite Math for Business*.

Accreditation

Serving as data officer overseeing the 2011-2024 Middle-States re-accreditation self-study. I conducted detailed analysis of data from all aspects of the college, and ensured the accuracy and integrity of all data based assertions in the study. This analysis is foundational to the self-study. This work is ongoing.