Sebastian Calvo
Curriculum Vitae

Personal

Email	sbc5715@psu.edu
Website	sites.google.com/view/sebastiancalvo
Citizenship	United States of America

Research Interest

My main area of research is Algebraic Geometry. In particular, I focus on polynomial interpolation problems that consider blow-ups of the projective plane and study symmetries on the corresponding variety in $\mathbb{P}^n$.

Education

2019-Present **PhD in Mathematics**
The Pennsylvania State University (PSU)
Thesis: The icosahedral line configuration, Waldschmidt Constants, and Coble Curves
Advisor: Jack Huizenga, John Lesieutre
Expected graduation date: Summer 2024

2019-2022 **Master's in Mathematics**
The Pennsylvania State University
Thesis: The icosahedral line configuration and Waldschmidt constants
Advisor: Jack Huizenga, John Lesieutre

2015-2019 **Bachelor's Degree in Mathematics**
The College of New Jersey (TCNJ)
Thesis: Projective Monoid Schemes and Extended Fans
Advisor: Steffen Marcus
GPA: 3.80 *Magna Cum Laude*

Publications

The icosahedral line configuration and Waldschmidt constants (Currently in submission process)
arXiv:2209.01499

Teaching Experience

Fall 2023 **Coordinator Assistant - PSU**
Created homework and exam rubric, supervised instructor performance, addressed student and instructor concerns, and facilitated bi-weekly instructor meetings.

2020-Present **Instructor - PSU**

College Algebra
Multivariable Calculus & Analytic Geometry
Pre-Calculus
Linear Algebra & Matrices

Summer 2020 **Teaching Assistant - PSU**
Differential Equations

2018 **Teaching Assistant - TCNJ**
Geometry
Real Analysis

Honors, Awards and Grants

2023 **Department of Mathematics Teaching Award**

2015-2019 **TCNJ iPics Scholarship**
Scholarship aimed to support students in mathematics and computer science

Poster Presentations

2023 **The Icosahedral Line Configuration and Waldschmidt Constants**
Conference on Unexpected and Asymptotic Properties of Algebraic Varieties

2018 **Algebraic Varieties and Normalization**
TCNJ Celebration of Student Achievement

2017 **Maps of Compact Riemann Surfaces**
TCNJ Celebration of Student Achievement

Conference and Research Talks Attended

2023 **Conference on Unexpected and Asymptotic Properties of Algebraic Varieties**
Lincoln, Nebraska

2023 **Commutative Algebra Market Preparation Workshop**
Lincoln, Nebraska

2022 **RTG/SCGP Graduate Workshop**
Birational Complexity of Algebraic Varieties
Stony Brook, New York

2019 **Joint Math Meeting**
Baltimore, Maryland

2018 **UC Berkeley Geometry and Topology Summer REU**
Berkeley, California

2018 **Joint Math Meeting**
San Diego, California

Service

2021-2022 **PSU Mathematics Graduate Student Association**
Organized events, communicated graduate student concerns to administration.

2020 **TCNJ Open House**
Volunteered as a alumni to engage with prospective students

2017-2019 **TCNJ Open House**
Volunteered as a current student to engage with prospective students

Skills

Languages   English (native speaker)
                     Spanish (fluent)
Software   LaTeX, Macaulay2, Python, SageMath, Geogebra,Mathematica