Eamon Quinlan-Gallego

155 South 1400 East, JWB-209
Salt Lake City, UT, 84112
✉ eamon.quinlan@utah.edu
🌐 eamonqg.github.io/

Employment

2022– **NSF postdoc**, *University of Utah*, Salt Lake City, UT, USA

2021–2022 **Wylie Assistant Professor**, *University of Utah*, Salt Lake City, UT, USA

Education

2015–2021 **Ph.D. in Mathematics**, *Univeristy of Michigan*, Ann Arbor, MI, USA
- Advised by Prof. Karen Smith.
- 10/2018–12/2019   Extramural study at the University of Tokyo, Japan, advised by Prof. Shunsuke Takagi.

2011–2015 **B. Sc. in Mathematics**, *Univeristy of Glasgow*, Glasgow, Scotland
- With Honours of the First Class.
- 08/2012–05/2013   Study abroad at the National University of Singapore.

Preprints and Publications

2023 Regular morphisms do not preserve F-rationality.
- With A. Simpson and A. Singh.
- Submitted.

2023 A formalism of F-modules for rings with complete local FFRT.
- Submitted.

2023 Bernstein-Sato theory for singular rings in positive characteristic.
- With J. Jeffries and L. Núñez-Betancourt.
- Transactions of the American Mathematical Society.

2021 Symmetry on rings of differential operators.
- Journal of Algebra.

2020 Bernstein-Sato theory for arbitrary ideals in positive characteristic.
- Transactions of the American Mathematical Society.

2020 Bernstein-Sato roots for monomial ideals in positive characteristic.
- Nagoya Mathematical Journal.

Scholarships and Awards

2023 Tucker Award, University of Utah.
- Recognizes exceptional research by a postdoc in the Mathematics Department.

2022–2025 NSF: Mathematical Sciences Postdoctoral Research Fellowship.

2018 Ito Foundation for International Education Exchange Scholarship.
- Provides funding for up to two years of study in Japan.

2015 Third Prize at the International Mathematics Competition for University Students.

2014	Ede and Ravenscroft Prize, University of Glasgow.
	○ Awarded annually to the most distinguished Science graduate of the year.
2013	Cunninghame Medal and Prize, University of Glasgow.
	○ Awarded annually to the most distinguished student in the Advanced Honours class of Mathematics at the University of Glasgow.
2011	Honorable Mention at the International Physics Olympiad.
2010	Gold Medal at the Spanish Physics Olympiad.

Service

2023	Organized a hybrid seminar on derived rings of differential operators.
2022	Organized a reading seminar on the Bhatt and Lurie's Riemann-Hilbert correspondence in positive characteristic.
2020, 2021	Co-organized the online Differential Operators in Commutative Algebra Seminar (DOCAS): `https://sites.google.com/umich.edu/docas`

Invited Talks

2023	AMS Sectional Meeting, Omaha, NE, USA.
	○ Special Session on Commutative Algebra, Differential Operators, and Singularities.
2023	BCAM, Bilbao, Spain.
	○ Meeting of the Spanish Network for Algebraic Geometry and Singularity Theory.
2022	Commutative Algebra Seminar at University of Minnesota
2021	Mathematical Congress of the Americas.
	○ Session: Differential Operators in Algebraic Geometry and Commutative Algebra.
	○ Video recording: `https://www.youtube.com/watch?v=-ZtFggLMAKg`
2021	Singularity Seminar of Nihon University.
2021	Commutative Algebra Seminar at University of Illinois at Chicago.
2021	Joint Mathematics Meetings.
	○ Special Session on Commutative Algebra in Positive Characteristic.
2020	Commutative Algebra Seminar at Purdue University.
2020	Commutative and Homological Algebra Market Presentations (CHAMP).
	○ Video recording: `https://www.youtube.com/watch?v=ayG3AHO-Obs`
2020	University of Arkansas Algebra Seminar.
2019	41$^{\text{st}}$ Japan Symposium on Commutative Algebra.
2019	Commutative Algebra and Algebraic Geometry Seminar, CIMAT.
2019	AMS Sectional Meeting, Madison, WI, USA
	○ Special Session on Homological and Char. $p > 0$ Methods in Commutative Algebra.
2019	Algebra Seminar, Universidad Autónoma de Madrid.
2019	RIMS x OIST joint workshop: "On the problem of resolution of singularities and its vicinity", Okinawa, Japan.
2018	Singularity Seminar of Nihon University

Teaching

As instructor of record:

University of Utah

F2023	MATH1220	Calculus II.
W2022	MATH3160	Complex Analysis for Engineers.
F2021	MATH1220	Calculus II.

University of Michigan

F2020	MATH116	Calculus II.
W2020	MATH116	Calculus II.
W2017	MATH115	Calculus I.
F2016	MATH105	Precalculus.

Other teaching experiences:

07/2023 PRAGMATIC.
- University of Catania, Italy.
- Teaching assistant.
- One week of lectures and two weeks of problem solving for stimulating research in algebraic geometry and commutative algebra among young people.

06/2023 SLMATH CMND Summer School on Commutative Algebra.
- University of Notre Dame, Indiana.
- Teaching assistant for Differential Operators mini-course.
- Two-week summer school on some topics in commutative algebra, covered across three mini-courses and problem sessions.

06/2022 Summer High School Program.
- University of Utah.
- Director.
- An intensive three-week program for motivated high school students.

08/2018 Course on Rings of Differential Operators.
- University of Michigan.
- A one-week introductory course on rings of differential operators aimed at graduate students and advanced undergrads.

07/2018 Michigan Math and Science Scholars, Fibonacci Numbers.
- University of Michigan
- Graduate Student Instructor under Prof. Melvin Hochster.
- A two-week intensive course to introduce highly motivated high-school students to number theory, combinatorics and game theory via the study of Fibonacci numbers.

07/2017 Michigan Math and Science Scholars, Fibonacci Numbers.

Languages

- English —— Native level.
- Spanish —— Mother tongue.
- Japanese —— Basic level.