# Eamon Quinlan

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#### Education

- 2015–2020 **Ph.D. in Mathematics**, University of Michigan, Ann Arbor, MI, USA.
  - Advised by Prof. Karen Smith.
  - o 10/2018–12/2019 Extramural study at the University of Tokyo, Japan, advised by Prof. Shunsuke Takagi.
- 2011–2015 B. Sc. in Mathematics, University of Glasgow, Glasgow, Scotland.
  - With Honours of the First Class.
  - o 08/2012-05/2013 Study abroad at the National University of Singapore, Singapore.

## Preprints and Publications

- 2020 Symmetry in the ring of differential operators of a normal Gorenstein algebra.
  - In preparation.
- 2019 Bernstein-Sato theory for arbitrary ideals in positive characteristic.
  - o arXiv:1907.11709
  - Submitted for publication.
- 2019 Bernstein-Sato roots for monomial ideals in positive characteristic.
  - o arXiv:1907.07297
  - Submitted for publication.

## Teaching

#### Graduate Student Instructor at the University of Michigan:

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

#### Other teaching experiences:

- 08/2018 Course on Rings of Differential Operators.
  - 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.
  - o Graduate Student Instructor under Prof. Melvin Hochster.
  - A two-week intensive course to introduce highly motivated high-school students to higher level mathematics such as number theory, combinatorics and game theory via the study of Fibonacci numbers.
- 07/2017 Michigan Math and Science Scholars, Fibonacci Numbers.

## Scholarships and Awards

- 2018 Ito Foundation for International Education Exchange Scholarship.
  - o 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.
  - Awarded annually to the most distinguished Science graduate of the year
- 2013 Cunninghame Medal and Prize.
  - $\circ$  Awarded annually to the most distinguished student in the Advanced Honours class of Mathematics
- 2011 Honorable Mention at the International Physics Olympiad.
- 2010 Gold Medal at the Spanish Physics Olympiad.

#### Invited Talks

- 2020 AMS Sectional Meeting, Special Session on Recent Developments in Commutative Algebra.
  - o Purdue University, West Lafayette, IN, USA.
- 2019 41st Japan Symposium on Commutative Algebra.
  - o Kurashiki, Okayama, Japan.
  - o Bernstein-Sato theory in positive characteristic.
- 2019 Commutative Algebra and Algebraic Geometry Seminar.
  - o Centro de Investigaciones Matemáticas, Guanajuato, Mexico.
  - Bernstein-Sato theory in positive characteristic.
- 2019 AMS Sectional Meeting, Special Session on Homological and Characteristic p>0 Methods in Commutative Algebra.
  - o University of Wisconsin, Madison, WI, USA.
  - o Bernstein-Sato theory in positive characteristic.
- 2019 Algebra Seminar
  - o Universidad Autónoma de Madrid, Madrid, Spain.
  - Rings of differential operators on Gorenstein algebras.
- 2019 RIMS x OIST joint workshop: "On the problem of resolution of singularities and its vicinity".
  - o Okinawa Institute of Science and Technology, Onna, Okinawa, Japan.
  - Bernstein-Sato theory in positive characteristic.
- 2019 Singularity Seminar.
  - o Nihon University, Tokyo, Japan.
  - Bernstein-Sato theory in positive characteristic.
- 2018 Singularity Seminar.
  - o Nihon University, Tokyo, Japan.
  - o Rings of differential operators on Gorsenstein algebras.

### Languages

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