Michelle Strumila

School of Mathematics and Statistics, University of Melbourne
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Research in algebraic topology: cyclic and modular operads, dendroidal sets, and TQFTs

Education

University of Melbourne — **Melbourne, Australia**
PhD. Mathematics — *2016–*
The cyclic infinity surface operad
Supervisor: Marcy Robertson

Monash University — **Melbourne, Australia**
Bachelor of Science (Adv) with honours — *2015*

- Honours thesis: TQFTs, contact geometry, and information theory
  Supervisor: Daniel Mathews
- Undergraduate thesis: Inhomogeneous Cosmology in an Anisotropic Universe
  Supervisor: Daniel Price

Awards and Grants

All awards are in approximate conversion to AUD.

MSRI travel grant: Derived geometry and higher categorical structures in geometry and physics summer school, 2018, $1,400

WIMSIG travel grant: Women in mathematics conference, Adelaide, 2017, $600

AMSI travel grant: Summer school, 2015

AMSI research award: Vacation research project, 2014, $2700

- Topological Quantum Field Theory and Information Theory
  Supervisor: Daniel Mathews

Conferences (Selected)

Topology in Australia and South Korea: IBS-CGP, Pohang, South Korea, 2018

Category theory, algebraic topology, and K-theory session at AustMS: Macquarie University, Sydney, Australia, 2017

WIMSIG conference: University of South Australia, Australia, 2017

- Coloured cyclic operads

Topology in Australia and South Korea: University of Melbourne, Australia, 2017

Higher structures in Geometry and Physics: Matrix, Creswick, Australia, 2016

AMSI VRS: University of New South Wales, 2014

- Topological Quantum Field Theory and Information Theory

Teaching

Monash University — **Melbourne, Australia**
Teaching Assistant — *2014–*

- *MTH2010: Multivariable calculus*
  Finding and proving limits in two variables (including $\varepsilon - \delta$ proofs), partial derivatives, Green's theorem and Stoke's theorem
- *MTH1030: Techniques for modelling*
  Calculus and linear algebra
- *MAT1841/MAT2003: Continuous mathematics for computer science*
  Combinatorics, probability, calculus, linear algebra
- *MAT1830: Discrete mathematics for computer science*
  Logic, induction, recursion, graph theory, combinatorics

Service

Graduate topology seminar: Co-organised with Xing Gu, Semester 2 2018

World Maths Competition: Superviser and judge, University of Melbourne, 2018

Graduate student website: Creating content (including video lectures) for a graduate student website, University of Melbourne, 2017

Languages

English: Fluent — *Mother tongue*

Italian: Moderate — *Completed VCE, visited Italy, currently out of practice*

Russian, Ukrainian, Latin: Basic — *Have studied at university level*