




Guillermo Aboumrad Sidaoui

Ph.D. Student in Computational and Mathematical Engineering, admitted Summer 2018

 Resume available Online

Bio

BIO

Willie was born and raised in Mexico City. He later moved to the UK to complete his high school studies. In the fall of 2014, Willie arrived at Stanford to begin his undergraduate career in Mathematics. Interested in applications of mathematical theory, he later gained admission to the Master's program at ICME. He is currently pursuing a doctoral degree under the advisory of Prof. Daniel Bump.

EDUCATION AND CERTIFICATIONS

- M.S., Stanford University , Computational and Mathematical Engineering (2018)
- B.S., Stanford University , Mathematics (2017)

PERSONAL INTERESTS

At a high level, Willie is mainly interested in applying mathematical theory to the solution of real world problems. His theoretical interests are wide-ranging and he is also interested in practical implementations.

Willie's current research focuses on Topological Quantum Computing (TQC). In particular, he studies the algebraic structure of the categories modeling the anyon systems required for the realization of TQC.

Teaching

COURSES

2021-22

- Introduction to Optimization: ENGR 62, MS&E 111, MS&E 211 (Sum)
- The ABCs of TQC: An introduction to the mathematics of Topological Quantum Computing: CME 350Q (Spr)

2020-21

- Calculus: MATH 20 (Sum)
- Introduction to Optimization: ENGR 62, MS&E 111, MS&E 211 (Sum)

2019-20

- Introduction to Scientific Computing: CME 108, MATH 114 (Sum)

2018-19

- Introduction to MATLAB: CME 192 (Aut)
- Introduction to Scientific Computing: CME 108, MATH 114 (Sum)

Professional

WORK EXPERIENCE

- Teaching Assistant - Stanford University (1/2017)
- Mathematics Grader - Stanford University (4/2015 - 10/2016)