Anthony Salib October 27 1997

anthonysalib97@gmail.com • www.anthonysalib.com

Academic Experience

Academic Mechanical and Electrical Engineering Association (AMIV), ETH Zürich Exam Preparation Course for Analysis III - upon invitation by AMIV

Department of Mathematics, ETH Zürich ZÜRICH, SWITZERLAND Teaching Assistant for Analysis III Autumn Semester, 2021 Department of Mathematics, ETH Zürich ZÜRICH, SWITZERLAND Teaching Assistant for Numerical Analysis II Spring Semester, 2021 Department of Mathematics, ETH Zürich Zürich, Switzerland **Teaching Assistant for Mathematics III** Autumn Semester, 2020 Mathematical Sciences Institute, Australian National University CANBERRA, AUSTRALIA Summer Scholar November 17 – January 18 Melbourne, Australia School of Physics and Astronomy, Monash University Summer Research Student November 16 – January 17

January 2022

Education

| ETH Zürich | Zürich, Switzerland |
|---|---------------------------------------|
| Mathematics MSc | 2022 |
| Advisor: Prof. Joaquim Serra. Expected Completion: | March 2022 |
| Monash University | Melbourne, Australia |
| Bachelor of Science Advanced - Research (Honours) | 2019 |
| Honours Advisor: Prof. Gregoire Loeper. GPA: 3.906 in Physics | Extended Major in Mathematics • Major |
| Nossal High School | Melbourne, Australia |
| Victorian Certificate of Education | 2015 |
| ATAR: 98.35 | |

Scholarships and Awards

| Maria Athanassenas Honours Scholarship | 2019 |
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| Alan Pryde Study Grant | 2019 |
| Monash Faculty of Science Deans List Award | 2018 |
| Monash Undergraduate Research Summer Schoalrship | 2018 |
| Australian National University Summer Research Scholarship | 2017 |
| Monash Undergraduate Summer Research Scholarship | 2016 |
| Monash University Scholarship for Excellence and Equity | 2015 |
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Research Interests

- Free Boundary problems
- Regularity of solutions to non-linear elliptic PDE
- Calculus of Variations, Minimal Surfaces and the Allen-Cahn Equation

Unpublished Articles

| Semester Paper: The Obstacle Problem | 2021 |
|--|--------------|
| Honours Thesis: Optimal Transport and Applications to Stochastic Optimal Control | 2 019 |
| Introduction to General Relativity | 2018 |
| Is π really embedded in quantum mechanics? | 2017 |
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Talks

| Schauder Estimates for uniformly elliptic PDE in Divergence Form Student Seminar in Elliptic Regularity Theory | 2021 |
|---|-------------------------|
| Free Boundary Regularity in the Classical Obstacle Problem Informal student seminar (co-organised with fellow students at ETH) | 2021 |
| Minimal Surfaces and the De-Giorgi Conjecture Zürich Undegraduate Colloquium in Mathematics and Physics (zucMA | P) 2020 |
| Spaces of Constant Curvature | Monash University, 2018 |
| Black holes in General Relativity | Monash University, 2018 |
| Finding π in the Sky | Monash University, 2017 |
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Technical Skills

Programming: • Matlab • Mathematica • Python

Language Skills

Proficient: • EnglishIntermediate: • Arabic - Egyptian DialectBeginner: • German - A2 Level