## **Stuart Thomas**

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**United States** 

#### Education

2017-B.S. in Physics (in progress)- William & Mary

Present Expected Graduation: May 23, 2021

Current GPA: 3.96/4.00

2013-2017 International Baccalaureate Diploma- Winter Park High School

> IB Points: 40 GPA: 4.00/4.00

#### Research Experience

May 2018-Research Assistant, Condensed Matter Theory Group

Present Dr. Enrico Rossi, Associate Professor of Physics, The College of William & Mary

> Theoretical analysis of Andreev reflection in metal-superconductor heterojunctions in quantum Hall systems

Calculation of non-equilibrium transport properties in Josephson junctions

May-August

Quantum Research Intern, Microsoft Quantum - Santa Barbara (Station Q)

Dr. Roman Lutchyn, Principal Researcher 2019

> Created simulations of biased Josephson Junctions in order to study the effects of multiple Andreev reflection

• Studied the effects of disorder on topological phase in a realistic simulated system

### **Conference Presentations**

March 2019 "Andreev reflection in Graphene-superconductor junctions in the quantum Hall

regime"

J. J. Cuozzo, **S. Thomas**, X. Hu, E. Rossi

Presented by J. J. Cuozzo at APS March Meeting, Boston, MA

#### Work Experience

June-July Computer Lab Assistant, First Congregational Church of Winter Park

2017 Instructed children on the use of computer programs such as Photoshop

> • Fixed computers when necessary, including restoring hard drives on multiple computers.

## **Activities**

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Aug 2018- Aug 2019	Vice President, William & Mary Fencing Club  • Manage rosters and membership in multiple national conferences  • Ensure there are safety officers at club practices and tournaments  • Manage club webpage and other public profiles
Aug 2019- Present	President, William & Mary Fencing Club  • Manage executive board  • Organized USFA open tournament with 60 participants  • Ensure club compliance with college and state policies
Aug 2017- Present	Principal Trombonist, William & Mary Symphony Orchestra  • Play a variety of repetoire holding concerts at least twice a semester  • Webmaster August 2018 to present, managing the orchestra webpage
Aug 2018- Present	<ul><li>Tutor, Society of Physics Students</li><li>Tutor two students in General Physics per semester</li></ul>
Jan 2018- Present	Member, Syndicate Hip Hop Dance Team  • Perform a hip-hop dance show once a semester
Jan 2018	Successful Participant, COMAP Mathematical Contest in Modeling
Jan 2019	Honorable Mention, COMAP Mathematical Contest in Modeling
2011-	<ul> <li>Amateur Programmer</li> <li>Developed two iPhone apps (Mowerthon and ByteMachine, since removed) with over 400 downloads</li> <li>Created web application that connected over 200 users from my high school.</li> </ul>

# Scholarships & Awards

2017	<ul><li>1693/Stamps Scholarship (merit), William &amp; Mary/National</li><li>full in-state tuition, room and board; \$5000 research stipend</li></ul>
Feb 2019	Recipient of RISE Germany Scholarship (merit), DAAD  • funding to perform research in Germany for a summer (did not accept)
2017	Monroe Scholarship (merit), William & Mary
Fall 2017- Present	Dean's List, William & Mary

## Skills

- Python, Numpy, PyPlot and matplotlib
- Linux/Unix command line, Git
- LaTeX
- Mathematica
- Web Development (HTML, JS, CSS, PHP, SQL)