# JEREMY K. THALLER

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#### **EDUCATION**

# Technische Universität München (TUM)

September 2019 - September 2020

(next year) M.S. in Applied and Engineering Physics

Erasmus Mundus: Masters in Materials Science Exploring Large Scale Facilities

# Williams College

September 2015 - Present

(in progress) B.A. in Physics with Honors

Pre-engineering studies

# Acton-Boxborough Regional High School

2011-2015

National AP Scholar National Honors Society

#### TECHNICAL STRENGTHS

Programming Languages MATLAB, JAVA, HTML, Python, Arduino (C/C++)

Data Software Mathematica, Excel, LabView, LoggerPro

Other Software LaTeX, Solid Works, Adobe Illustrator, Adobe Photoshop

Machining Experience Bridgeport Milling, CNC Milling, 3D Printing, Laser Cutting

#### RESEARCH EXPERIENCE

#### **Soft Condensed Matter Physics**

May 2018 - Present

Undergraduate Honors Thesis

Advised by Katharine E. Jensen, Professor of Physics

Williams College

- · Designed and built stretching apparatus to induce equibiaxial stretch in soft materials
- · Used Fluorescent Confocal Microscopy to measure the strain dependency of solid surface stress is soft materials via adhesion

### Atomic, Molecular, and Optical Physics

June - August 2017

Undergraduate Research Assistant

Advised by Protik K. Majumder, Professor of Physics

Williams College

- · Programed a PID controller in Lab View to thermally regulate an oven to within  $\pm .4^{\circ}$  C at temperatures around  $950^{\circ}$  C
- · Designed a deposition-rate detector based on the mass dependent frequency of Quartz Crystals

#### ADVANCED PHYSICS COURSEWORK

Condensed Matter Physics (Spring 2019)

Thermodynamics and Statistical Mechanics (Spring 2019)

Advanced Classical Mechanics and Fluid Dynamics (Tutorial)

Gravity

Particle Physics (Tutorial)

Quantum Mechanics

Philosophical Implications of Modern Physics

Electricity and Magnetism

Mathematical Methods for Scientists

Vibrations, Waves, and Optics

#### ADDITIONAL INFORMATION

Interests Bassoon, Jazz Piano, Running, Bicycle Repair, Arduinos, Rocketry, Graphic Design Languages German (Currently B2)