# JEREMY K. THALLER

**EDUCATION** 

978-496-7990  $\diamond$  jkt2@williams.edu  $\diamond$  Acton, MA 01720

# Technische Universität München (TUM)

September 2019 - September 2020

M.S. in Applied and Engineering Physics

Erasmus Mundus: Masters in Materials Science Exploring Large Scale Facilities

# Williams College

September 2015 - May 2019

(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 AND WORK 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 LabView to thermally regulate a high temperature oven
- · Designed a deposition-rate detector based on the mass dependent frequency of Quartz Crystals

### Teaching Assistant and Tutoring

Sept 2016 - Present

Physics Department, Math and Science Resource Center

Williams College

- · TA for Math Methods for Scientists (diff EQ's, Fourier, etc.) & Introductory Classical Mechanics
- · Tutored all calculus and introductory physics courses at Math/Science resource center

IT Work June 2016 - Aug 2016

Office of Information Technology

Williams College

- · Set up, repaired, and imaged new computers
- · Worked the Faculty staff support line

### ADVANCED PHYSICS COURSEWORK

Condensed Matter and Solid State Physics Gravity

Particle Physics Thermodynamics and Statistical Mechanics

Quantum Mechanics Electricity and Magnetism

Advanced Classical Mechanics and Fluid Dynamics Vibrations, Waves, and Optics

Mathematical Methods for Scientists Philosophical Implications of Modern Physics

#### ADDITIONAL INFORMATION

Interests Bassoon, Jazz Piano, Track & Field, Bicycle Repair, Rocketry, Graphic Design

Languages German (Currently B2)