

# MATHEW POTTS

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## EDUCATION

<b>Ph.D, Physics</b>	2021-Present
University of Utah, Department of Physics	Salt Lake City
<ul style="list-style-type: none"><li>• 3.64 GPA</li></ul>	
<b>MS, Physics</b>	2017-2021
University of Utah, Department of Physics	Salt Lake City
<ul style="list-style-type: none"><li>• 3.64 GPA</li></ul>	
<b>BS, Physics</b>	2015-2017
University of Utah, Department of Physics	Salt Lake City
<ul style="list-style-type: none"><li>• 3.73 GPA</li></ul>	

## RESEARCH INTERESTS

- High Energy Physics/Cosmic Rays
- Neutrino Physics
- Astrophysics/Astronomy
- Dark Matter

## TEACHING EXPERIENCE

<b>University of Utah</b>	2017-2019, 2022
Teacher Assistant	
<ul style="list-style-type: none"><li>• Create lesson plans for in class discussion</li><li>• Help students overcome misunderstandings</li></ul>	
<b>Totally Tutoring</b>	2014-2015
Contracted Tutor	
<ul style="list-style-type: none"><li>• Tutored physics, mathematics, and chemistry</li><li>• Created take home assignments and short lesson plans</li></ul>	

## RESEARCH EXPERIENCE

<b>Graduate Research Assistant</b>	2015-Present
University of Utah, The Telescope Array Project	
<ul style="list-style-type: none"><li>• Collecting/analyzing data from the MD/TALE/TAx4 Fluorescence detectors at the Telescope Array in Delta, UT</li><li>• Hands on work with photomultiplier tubes, scintillators, and other data acquisition equipment</li><li>• Created scripts to analyze/collect data in R, C++, C, Labview, and Python.</li><li>• Worked on the sFLASH experiment that was conducted at SLAC National Accelerator Laboratory</li><li>• Cosmic ray composition and energy spectrum work</li></ul>	

**SLCC Final Research Project**

2014-2015

Salt Lake Community College, “A Closer Look at the KOI-22 Light Curve”

- Analyzed the Kepler spacecraft’s light curve data searching for exoplanets

**PUBLICATIONS**

- S. Atwood *et al.* (sFLASH Collaboration) *The instruments of sFLASH experiment*. PoS(2017)407.
- S. Atwood *et al.* (sFLASH Collaboration) *Air fluorescence yield measurement at SLAC National Laboratory: sFLASH experiment*. To be published in the Physical Review Letters pending our results from our analysis of the data gathered at SLAC.
- M.Potts and C. Jui (TA Collaboration) *Monocular Energy Spectrum using the TAx4 Fluorescence Detector*. PoS(2021)343.

**CONFERENCES/TALKS**

- M. Potts on behalf of TA. *TAx4 Cosmic Ray Energy Spectrum*. University of Utah; 2020, Research Symposium.
- M. Potts on behalf of TA. *Monocular Energy Spectrum using the TAx4 Fluorescence Detector*. ICRC(2021).

**ACADEMIC REFERENCES****Charlie Jui**

The University of Utah, Professor (Thesis Advisor)

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