

Marcell Howard

Curriculum Vitae

PERSONAL DETAILS

Address 510 S Highland Ave, Pittsburgh, PA, 15206
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EDUCATION

University of Pittsburgh, Pittsburgh, PA *2019-Present*
Ph.D., Physics and Astronomy
Case Western Reserve University, Cleveland, OH *2015-2019*
B.S., Mathematics and Physics

RESEARCH EXPERIENCE

Case Western Reserve University *Sept 2018-May 2019*
Senior Thesis advised by Kurt Hinterbichler
Investigated the possible deviations that a theory of dark energy may have from General Relativity by applying the 3 of the 4 classical tests of General Relativity
Rutgers University *Jun 2018-Aug 2018*
Research Experience for Undergraduates advised by Andrew Baker
Probed the evolution of galaxies by stacking stellar mass selected samples by developing a pipeline that automated the process for modeling the stellar population in over 2000 galaxies
Cornell University *Jun 2017-Aug 2017*
Research Experience for Undergraduates advised by Gordon Stacey
Used far-infrared fine structure lines for characterizing the star formation processes in nearby galaxies by using Python to process, analyze, and perform calculations on various data files

TEACHING EXPERIENCE

Supplemental Instructor *Sept 2017-May 2019*
MATH121+122: Calculus for Scientists and Engineers I and II

- Held 3 small groups and 1 recitation session per week.
- Graded quizzes and tests.

Teaching Assistant *Sept 2017-May 2019*
PHYS121+122: General Physics I – Mechanics and General Physics II – Electricity and Magnetism

- Graded written homework handed in every week.
- Handed out in class assignments and provided help to various students.

TALKS AND POSTER PRESENTATIONS

Case Western Reserve University <i>Counting the Degrees of Freedom in Mimetic Gravity</i> Contributed talk	<i>Oct 2018</i>
Rutgers University <i>Probing the Evolution of Galaxies Using Stellar Mass Selected Samples</i> Contributed poster and talk	<i>Aug 2018</i>
Cornell University <i>Using Far-Infrared Fine-Structure Lines for Characterizing the Star Formation Processes in Nearby Galaxies</i> Contributed poster and talk	<i>Aug 2017</i>

SKILLS

<i>Programming</i>	Python, Mathematica, L ^A T _E X,
<i>Software</i>	SciPy/matplotlib, AstroPy, git

AWARDS

Kenneth P. Dietrich School of Arts & Sciences Fellowship	<i>August 2019</i>
Arts and Sciences Summer Research Predoctoral Fellowship	<i>June 2020</i>
Case Alumni Scholarship	<i>May 2017</i>
University Scholarship	<i>Sept 2015</i>
CWRU Grant	<i>Sept 2015</i>
Hayden Scholarship	<i>Dec 2017</i>
Gaemsslen Grant Fund	<i>Dec 2017</i>