Marcell Howard

Curriculum Vitae

PERSONAL DETAILS

Address	627 East 43rd Street, Brooklyn, NY, 11203
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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.Sc., 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 *Oct 2018*
Counting the Degrees of Freedom in Mimetic Gravity
Contributed talk

Rutgers University *Aug 2018*
Probing the Evolution of Galaxies Using Stellar Mass Selected Samples
Contributed poster and talk

Cornell University *Aug 2017*
Using Far-Infrared Fine-Structure Lines for Characterizing the Star Formation Processes in Nearby Galaxies
Contributed poster and talk

SKILLS

Programming	Python, Mathematica, LaTeX,
Software	SciPy/matplotlib, AstroPy, git

AWARDS

Kenneth P. Dietrich School of Arts & Sciences Fellowship *August 2019*

Arts and Sciences Summer Research Predoctoral Fellowship *June 2020*

Case Alumni Scholarship *May 2017*

University Scholarship *Sept 2015*

CWRU Grant *Sept 2015*

Hayden Scholarship *Dec 2017*

Gaemsslen Grant Fund *Dec 2017*