

Imad Pasha

Curriculum Vitæ (January 19, 2018)

<http://ugastro.berkeley.edu/~ipasha>

ipasha@berkeley.edu

EDUCATION

B.A. Astrophysics (Honors), B.A. Physics, Minor Creative Writing 2013-2017
UNIVERSITY OF CALIFORNIA, BERKELEY
Research Advisor: Prof. Mariska Kriek

RESEARCH POSITIONS

SAO Research Intern [NSF REU] 2016-2017
HARVARD-SMITHSONIAN CENTER FOR ASTROPHYSICS
Advisor: Dr. Reinout van Weeren
Project: *Discovery of Gravitationally Lensed X-ray Sources in the CLASH Galaxy Cluster Sample*

Undergraduate Researcher / Junior Specialist 2014-2018
UNIVERSITY OF CALIFORNIA, BERKELEY
Advisor: Prof. Mariska Kriek
Project: *Modeling Well-sampled Spectral Energy Distributions of Distant Galaxies via a Bayesian Inference Framework*

URCA Research Intern [NSF REU] 2014
NORTH CAROLINA STATE UNIVERSITY
Advisor: Prof. John Blondin
Project: *Hydrodynamic Modeling of the Jet Structures in Cassiopeia A.*

REFEREED PUBLICATIONS

1. Pasha, I., Kriek, M., Johnson, B., Conroy, C., Leja, J., Labbé, I., Shivaiei, I. “Modeling Well-sampled Spectral Energy Distributions of Distant Galaxies via a Bayesian Inference Framework” (*in prep*).
2. Shivaiei, I.; Kriek, M.; Reddy, N. A.; Shapley, A. E.; Barro, G.; Conroy, C.; Coil, A. L.; Freeman, W. R.; Mobasher, B.; Siana, B.; Sanders, R.; Price, S. H.; Azadi, M.; Pasha, I.; Inami, H., “The MOSDEF Survey: The Strong Agreement between $H\alpha$ and UV-to-FIR Star Formation Rates for $z \sim 2$ Star-forming Galaxies”, *The Astrophysical Journal Letters* **820**, (2016).

OTHER PUBLICATIONS

1. Pasha, I., van Weeren, R., Andrade-Santos, F., “Discovery and Characterization of Gravitationally Lensed X-ray Sources in the CLASH Sample”, *American Astronomical Society, AAS Meeting #229, id.346.05*, (2017).

2. M.L. Graham, G. Halevi, I. Pasha, I. Shivvers, H. Yuk, A.V. Filippenko (UC Berkeley), “[Classification of PSN J09254453+3416361 as a Type II Supernova](#)”, *Astronomers Telegram ATel 8169*, (2016).
3. [Imad Pasha](#) & Christopher Agostino, “[Python for Astronomers: An Introduction to Scientific Computing](#)”, **Publicly Available**, (2016).

OBSERVING EXPERIENCE

- 2018 — MOSFIRE (Keck Observatory), *P.I. Mariska Kriek*.
- 2016 — MOSFIRE (Keck Observatory), *P.I. Ryan Trainor*.
- 2016 — Shane Kast (Lick Observatory), *P.I. Melissa Graham*.
- 2016 — 1 meter (Leuschner Observatory).
- 2014 — Nickel 1 meter (Lick Observatory).

HIGH PERFORMANCE COMPUTING EXPERIENCE

- 2014 — Kepler, Tycho Clusters (NC State)
- 2014 — TACC Stampede (XSEDE)
- 2017 — Edison, Cori (NERSC)

TEACHING AND MENTORING

Compass Program Mentor 2016-2017

UC Berkeley Physics Department

Mentored incoming students one-on-one in navigating the Physics and Astrophysics majors.

Undergraduate GSI (T.A.) 2015-2016

Astronomy 120

Instructor: Gaspard Duchene. Helped teach the senior-level laboratory in optical and infrared astronomy.

Course Instructor 2015-2017

Astronomy 98/198 — Introductory Python for Astronomers

Designed and taught the Astronomy Department’s introductory Python programming class for Astrophysics majors.

Telescope Operator 2015-2017

Astronomy C10 — instr. Alex Filippenko & Leo Blitz

Hired to operate the rooftop, 17” Treffers telescope owned by the Astronomy Department. Held weekly or multi-weekly viewing sessions for students of the introductory astronomy classes as well as for donor events and public outreach events.

NON-RESEARCH POSITIONS & OUTREACH

Editor & Writer 2017-2018

THE DAILY CALIFORNIAN

Served as Weekender Editor (sp. 2018) and Arts & Entertainment Editor (summer 2017) at the newspaper of record for the city of Berkeley. Other positions held: Music Beat Reporter, Film Beat Reporter, Senior Staff, Staff Photographer. [[Author page.](#)] [[Photography portfolio.](#)]

Co-founder and Organizing Committee Member

2015-

UNDERGRADUATE ASTRONOMY SOCIETY

Co-founded the Undergraduate Astronomy Society at Berkeley (UAS), an organization dedicated to increasing community among the undergraduate majors, providing departmental and external resources, facilitating collaboration and points of connection between students, graduate students, post-docs, and faculty, and serving as an interface to bring student interests and concerns to the department in a collective way. Worked closely on various aspects of the organization, from organizing social events to organizing talks from industry or academic visitors.

Organizing Member

2015-

UC BERKELEY ASTRONOMY NIGHTS

Helped organize and run public astronomy nights in the department, consisting of an hour long talk by a professor, followed by a public stargazing event on the roof of the department. Involved with running the telescope, collaborating with speakers, as well as organization and logistics.

CONFERENCES & TALKS

- 2018 — **Modeling UV-to-FIR Composite Spectral Energy Distributions of Distant Galaxies via an MCMC-driven Framework [Poster]**, AAS 231.
- 2017 — **Gravitationally Lensed AGN in the CLASH Sample [Poster]**, AAS 229.
- 2016 — **Gravitationally Lensed AGN in the CLASH Sample [Talk]**, Harvard-Smithsonian CfA Research Symposium
- 2016 — **Fitting Composite Galaxy SEDs with MCMC and Stellar Population Synthesis Models [Talk]**, UC Berkeley Astronomy Department Research Symposium
- 2015 — **Jet Morphology in Cassiopeia A [Poster]**, Biennial Fifty-one Ergs Supernova Conference
- 2014 — **Jet Morphology in Cassiopeia A [Poster]**, Annual UNC Undergraduate Research Symposium
- 2014 — **Jet Morphology in Cassiopeia A [Poster]**, Annual NC State Undergraduate Research Symposium

HONORS & AWARDS

- 2018 — Chambliss Award-Honorable Mention: AAS 231.
- 2017 — Dorothea Klumpke-Roberts Award for Outstanding Scholarly Achievement (UC Berkeley Astronomy Department).
- 2017 — Chambliss Award-Honorable Mention: AAS 229.
- 2014, 2015, 2016, 2017 — Honors to Date, GPA award corresponding to graduation GPA with Distinction (cum laude).
- 2015 — Third Place Poster Prize, Biennial Fifty-one Ergs Supernova Conference
- 2014 — Deans Honors, Awarded to those GPAs in the top 4% of L&S (College of Letters and Sciences) undergraduates every semester.
- 2014 — First Place Poster Prize, Annual UNC Undergraduate Research Symposium