



Christian Aganze

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Research Interests

Observational astronomy focusing on the lowest mass star and brown dwarf populations,
with applications of machine learning methods on large datasets

Education

- 2016 –  **Graduate Student (PhD)**, Physics, University of California, San Diego, CA
2012 – 2016  **B.Sc. Physics**, Morehouse College, Atlanta, GA

Research and Teaching Experience

- 2016–  **Teaching Assistant for Physics 1A& 1AL**, UC San Diego
2016 –  **Graduate Student Researcher**, UC San Diego
The Large Synoptic Survey Telescope (LSST) Data Science Fellowship
2014 – 2016  **Undergraduate Student Researcher**, UC San Diego

Scientific Conference Presentations & Posters

- 2021  **American Astronomical Society Meeting (AAS 237)**
Studying Ultracool Dwarfs with the Nancy Grace Roman Space Telescope: Predictions from Monte-Carlo Simulations (*Talk*)
Brown Dwarfs in the Galaxy: Predictions for Future Wide-Field Observatories (*Poster*)
- 2020  **National Society of Black Physicists (NSBP)**
Searching for Distant Ultracool Dwarfs in Deep HST/WFC3 Surveys (*Poster*)
Beth Brown Memorial Award
- 2019  **Nancy Grace Roman Telescope Meeting**
Brown Dwarfs Beyond Gaia: A Deep Survey of late-M, L, T Dwarfs with HST-WFC3 Parallel Fields (*Poster*)
- 2018  **20th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (Cool Stars 20)**
Brown Dwarfs Beyond Gaia: A Deep Survey of late-M, L, T Dwarfs with HST-WFC3 Parallel Fields (*Poster*)
- 2017  **American Astronomical Society Meeting (AAS 228, 229)**
Toward a Comprehensive Sample of VLM Chemical Abundances with APOGEE (*Poster*)
- 2016  **American Astronomical Society Meeting (227)**
Identifying Distant Brown Dwarfs in HST/WFC3 Parallel Fields (*Poster*)
- 2015  **National Society of Black Physicists (NSBP)**
Characterization of the M Dwarf Binary System GJ 660.1AB (*Poster*)
- 2014  **Society for Advancement of Chicanos/Hispanics and Native Americans in Science conference (SACNAS)**
Characterization of the M Dwarf Binary System GJ 660.1AB (*Poster*)
Best Poster Award

Publications

Peer-Review Journal Articles

- 1 Kirkpatrick, J. D., Gelino, C. R., Faherty, J. K., Meisner, A. M., Caselden, D., Schneider, A. C., ... Wedraski, Z. (2020, November). The Field Substellar Mass Function Based on the Full-sky 20-pc Census of 525 L, T, and Y Dwarfs. *arXiv e-prints*, arXiv:2011.11616. arXiv: 2011.11616 [astro-ph.SR]
- 2 Meisner, A. M., Faherty, J. K., Kirkpatrick, J. D., Schneider, A. C., Caselden, D., Gagné, J., ... Backyard Worlds: Planet 9 Collaboration. (2020, August). Spitzer Follow-up of Extremely Cold Brown Dwarfs Discovered by the Backyard Worlds: Planet 9 Citizen Science Project. *899*(2), 123. doi:10.3847/1538-4357/aba633. arXiv: 2008.06396 [astro-ph.SR]
- 3 Burgasser, A. J., Lopez, M. A., Mamajek, E. E., Gagné, J., Faherty, J. K., Tallis, M., ... Aganze, C. (2016, March). The First Brown Dwarf/Planetary-mass Object in the 32 Orionis Group. *820*(1), 32. doi:10.3847/0004-637X/820/1/32. arXiv: 1602.03022 [astro-ph.SR]
- 4 Aganze, C., Burgasser, A. J., Faherty, J. K., Choban, C., Escala, I., Lopez, M. A., ... Rockward, W. (2016, February). Characterization of the Very-low-mass Secondary in the GJ 660.1AB System. *151*(2), 46. doi:10.3847/0004-6256/151/2/46. arXiv: 1512.08659 [astro-ph.SR]

Other

- 1 Dimitriadis, G., Foley, R. J., Aganze, C., Burgasser, A., Gerasimov, R., Hsu, C., ... Theissen, C. (2020a, March). *Spectroscopic Classifications of AT 2020dvr with the Lick Shane telescope*.
- 2 Dimitriadis, G., Foley, R. J., Aganze, C., Burgasser, A., Gerasimov, R., Hsu, C., ... Theissen, C. (2020b, March). *UCSC Transient Classification Report for 2020-03-04*.

Awards, Fellowships & Training

- 2020
 - Beth Brown Memorial Award (AAS, NSBP)
 - Big Data and Deep Learning Workshop (Pittsburg Supercomputing Center)
- 2017
 - Kraft Observational Astronomy Workshop (Lick Observatory)
 - Scicoder Workshop (Vanderbilt University)
- 2016
 - UC-HBCU Graduate Student Fellowship
- 2015
 - FAMOUS Travel Grant (AAS)
- 2014
 - Poster Award (SACNAS)

Skills

- Coding
 - Python, Github, Parallel Computing
- Misc.
 - Teaching, Telescope Observations

Organizations

- 2016–
 - American Astronomical Society (AAS)
 - National Society of Black Physicists (NSBP)
 - UCSD Graduate Student Association (GSA)
 - Physics Graduate Student Council (PGC)
- 2014–2016
 - Society of Physics Students (SPS)