

TAWEEWAT SOMBOONPANYAKUL – CV

CONTACT INFORMATION MIT Kavli Institute, Massachusetts Institute of Technology
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EDUCATION

Massachusetts Institute of Technology expected 2021

- Ph.D. in Physics, Advisor: Prof. Michael McDonald
- Thesis: *The Clusters Hiding in Plain Sight (CHiPS) survey*

University of Chicago 2011-2015

- BA in Physics with specialization in Astrophysics
- Honor Thesis Advisor: Prof. Hsiao-Wen Chen

AWARDS

2019 Representative to Lindau Nobel Laureate Meetings, Lindau, Germany
2015 **MIT Clark Fellow**, Graduate Research Fellowship, MIT
2015 **Phi Beta Kappa, Dean's List**, The University of Chicago
2014 **The FOTI Global Leadership Award**, The University of Tokyo,
2014, 2015 **The Maroon Key Society**, The University of Chicago,
2013 **Walter and Fay Selove Prize in Physics**, The University of Chicago

SELECTED PRESS

- MIT News Press – “*Sprawling galaxy cluster found hiding in plain sight*”, Aug. 2018
- Space.com Press – “*Huge Galaxy Cluster Found Hiding in Plain Sight*”, Jun. 2018

RESEARCH GRANTS

- *Hubble*, 2019 Mid Cycle
- *Chandra*, 2018

OBSERVING

Successful Telescope Proposal as PI or as the majority contributor

- *Hubble*, 2019 Mid Cycle, 2 orbits, “Imaging a Rare Starburst Central Galaxy in a Merging Cluster”
- Magellan, 2018B, 3 nights, “Spectroscopic Follow Up for the CHiPS galaxy clusters candidates”
- *Chandra*, 2018, 137 ks, “A Unique Sample of Extreme-BCG Clusters at $0.2 < z < 0.6$ ”
- Magellan, 2016B, 3 nights, “The CHiPS Surveys: Clusters Hiding in Plain Sight”
- Magellan, 2016A, 3 nights, “The CHiPS Surveys: Clusters Hiding in Plain Sight”

Observing Experience

- Magellan Telescope, Las Campanas Observatory (LCO), Long-slit spectroscopy with LDSS3, 2018
- Magellan Telescope, (LCO), Optical imaging with PISCO, 2017B
- Magellan Telescope, (LCO), Optical imaging with PISCO, 2017A
- Magellan Telescope, (LCO), Optical imaging with PISCO, 2016B

TEACHING

Undergraduate/Graduate Taught Course

- Graduate Teaching Assistant, for Prof. Michael McDonald in 8.902 graduate-level Astrophysics II at MIT, 2019
- Graduate Teaching Assistant, for Prof. Kiyoshi Masui in 8.01 Physics I at MIT, 2018
- College Core Tutor Program for Physics at the University of Chicago, 2015

OUTREACH

- Session Chair, “Galaxy Cluster I”, *235th Meeting American Astronomical Society*, 2020
- Member of MIT Astrogazers, Observing with the public on the sidewalk, 2017-Present
- Volunteer at MIT Museum, “Nautical Day with Celestial Navigation”, Nov. 2018
- Volunteer at Cambridge Science Festival, “Solar Observing”, Apr. 2018
- Volunteer at MIT Museum, “Mathernoon Day”, Mar. 2018
- Public Speaker at Mahidol University, “Impact of Active Galaxies on Clusters”, Aug. 2017
- World Wide Telescope Ambassadors at Harvard University, 2016
- Organizer for a Yerkes Observatory Weekend Workshop, WI, 2014
- President of Ryerson Astronomical Society at the University of Chicago, 2013-2014

RESEARCH PRESENTATION

Contributed Talks

- *235th Meeting American Astronomical Society*, AAS, Honolulu, HI, Jan. 2020, “Clusters Hiding in Plain Sight (CHiPS)”
- *Planetary Systems: A Synergistic View*, ICISE, Quy Nhon, Vietnam, Jul. 2015, “Transiting Exoplanet’s Impact Parameter: Long vs Short Cadence”
- *UChicago-Northwestern Exoplanet Workshop*, Alder Planetarium, IL, 2014, “Transiting Exoplanet’s Impact Parameter: Long vs Short Cadence”

Seminars

- University of Missouri, Kansas City, MO, Aug. 2020
- National Astronomical Research Institute of Thailand, Chiang Mai, Thailand, Jan. 2019
- Kasetsart University, Bangkok, Thailand, Jan. 2019
- Mahidol University, Bangkok, Thailand, Jan. 2019
- Carnegie Observatories, Pasadena, Dec. 2018

Conference Posters

- *Tracing Cosmic Evolution with Clusters of Galaxies*, Sesto (BZ), Italy, Jul. 2019
- *69th Lindau Nobel Laureate Meeting*, Lindau, Germany, Jul. 2019
- *17th Meeting High Energy Astrophysics Division*, Monterey, CA, Mar. 2019
- *SnowCluster – The Physics of Galaxy Clusters*, Snowbird, UT, Mar. 2018
- *Chandra Science for the Next Decade*, Cambridge, MA, Aug. 2016
- *227th Meeting American Astronomical Society*, AAS, Kissimmee, FL, Jan. 2016

REFEREED PUBLICATIONS

1. **Somboonpanyakul, T.**; McDonald, M.; Gaspari, M.; Stalder, B.; Stark, A., Bayliss, M. in prep., “The Clusters Hiding in Plain Sight (CHiPS) Survey: CHIPS1911+4455 (Phoenix meets El Gordo)”

2. **Somboonpanyakul, T.**; McDonald, M.; Gaspari, M.; Stalder, B.; Stark, A., submitted, *ApJ*, “The Clusters Hiding in Plain Sight (CHiPS) Survey: Complete Sample of Extreme BCG Clusters”
3. McDonald, M.; McNamara, B. R.; Voit, G. M.; Bayliss, M.; Benson, B. A.; Brodwin, M.; Canning, R. E. A.; Florian, M. K.; Garmire, G. P.; Gaspari, M.; Gladders, M. D.; Hlavacek-Larrondo, J.; Kara, E.; Reichardt, C. L.; Russell, H. R.; Saro, A.; Sharon, K.; **Somboonpanyakul, T.**; Tremblay, G. R.; van Weeren, R. J., 2019, *ApJ*, 885:63, “Anatomy of a Cooling Flow: The Feedback Response to Pure Cooling in the Core of the Phoenix Cluster”
4. **Somboonpanyakul, T.**; McDonald, M.; Lin, H. W.; Stalder, B.; Stark, A., 2018, *ApJ*, 863:122, “The Clusters Hiding in Plain Sight (CHiPS) Survey: A First Discovery of a Massive Nearby Cluster Around PKS1353-341”