

ANIRUDH CHITI

achiti@mit.edu

EDUCATION

Massachusetts Institute of Technology Aug 2014 – Present
Ph.D Candidate in Physics
Advised by Anna Frebel
GPA: 5.0/5.0

Cornell University May 2014
B.A. in Physics *Magna Cum Laude* and B.A. in Mathematics *with Distinction*
Minor in Astronomy
GPA: 3.85/4.3

AWARDS & HONORS

Henry Kendall Teaching Award, Graduate teaching award in Physics 2016
Honorable Mention, NSF Graduate Research Fellowship Program 2016
Whiteman Fellow, First-year fellowship at MIT 2014 – 2015
Cranston and Edna Shelley Award, Undergraduate research award in Astronomy 2014
Dean's List, Cornell University, GPA-based award Fall 2010 – Fall 2013

TEACHING

Graduate Teaching Assistant, MIT, 8.287: Techniques of Optical Astronomy Present
Graduate Teaching Assistant, MIT, 8.287: Techniques of Optical Astronomy Fall 2017
Student rating: **6.7/7.0**

Graduate Teaching Assistant, MIT, 8.01: Physics I – Mechanics Fall 2016
Student rating: **6.6/7.0**

Graduate Teaching Assistant, MIT, 8.01: Physics I – Mechanics Fall 2015
Student rating: **6.4/7.0**

Grader, MIT, 8.902: Graduate Astrophysics II Fall 2015

Undergraduate TA, Cornell University, Fundamentals of Physics II Spring 2012

OUTREACH & SERVICE

Co-director, MIT Sidewalk Astronomy Club Fall 2017 – Present

Organizing Committee, JINA-CEE Frontiers in Nuclear Astrophysics Meeting May 2018

Public Talk: “Searching for the First Stars”, MIT IAP January 2018

Online Project Course Instructor, MIT MOSTEC Summers 2015 – 2018
Instructed an online astrophysics course for rising seniors in high school.
Responsibilities included updating the curriculum, course administration,
holding online office hours, and helping students prepare a final presentation at MIT.

PUBLICATIONS

9. Frebel, A. L., Ji, A.P., Ezzeddine, R., Hansen, T. T., **Chiti, A.**, Thompson, I. B., Merle, T., *Chemical Abundance Signature of J0023+0307 – A Second-Generation Main-Sequence Star with $[Fe/H] < -6$. Accepted to ApJ.*
8. **Chiti, A.**, Frebel, A. L., Ji, A. P., Jerjen, H., Kim, D., Norris, J., *Chemical Abundances of new member stars in the Tucana II dwarf galaxy.* 2018, ApJ, 857, 74.
7. **Chiti, A.**, Simon, J. D., Frebel, A. L., Mateo, M., Bailey, J. I., Crane, J., Shectman, S., Thompson, I., Walker, M., *Detection of a Population of Carbon-enhanced Metal-poor stars in the Sculptor dwarf galaxy.* 2018, ApJ, 856, 142.
6. Placco, V. M., Frebel, A. L., Beers, T. C., Yoon, J., **Chiti, A.**, Heger, A., Chan, C., Casey, A. R., Christlieb, N., *Observational Constraints on First-Star Nucleosynthesis. II. Spectroscopy of an Ultra metal-poor CEMP-no Star,* 2016, ApJ, 833, 21.
5. Kim, D., Jerjen, H., Geha, M., **Chiti, A.**, Milone, A. P., Da Costa, G., Mackey, D., Frebel, A. L., Conn, B., *Portrait of a Dark Horse: a Photometric and Spectroscopic Study of the Ultra-faint Milky Way Satellite Pegasus III,* 2016, ApJ, 833, 16.
4. **Chiti, A.**, Chatterjee, S., Wharton, R. S., Cordes, J., Lazio, T. J. W., Kaplan, D. L., Bower G. C., Croft, S., *Transient Events in Archival Very Large Array Observations of the Galactic Center,* 2016, ApJ, 833, 11.
3. Ji, A. P., Frebel, A. L., Simon, J. D., **Chiti, A.**, *Complete Element Abundances of Nine Stars in the r-process Galaxy Reticulum II,* 2016, ApJ, 830, 93.
2. Ji, A. P., Frebel, A. L., **Chiti, A.**, Simon, J. D., *R-process enrichment from a single event in an ancient dwarf galaxy,* 2016, Nature, 10.1038, 1476-4687.
1. Frebel, A. L., **Chiti, A.**, Ji, A. P., Jacobson H. R., Placco, V. M., *SD 1313-0019 – Another second-generation star with $[Fe/H] = -5.0$, observed with the Magellan Telescope,* 2015, ApJL, 810, L27.

TALKS & POSTERS

12. **Poster.** *Chemical characterization of the Tucana II and Tucana III dwarf galaxies using SkyMapper photometry.* JINA-CEE Frontiers in Nuclear Astrophysics Meeting, May 2018.
11. **Talk.** *Overview talk– Measuring stellar chemical abundances to trace the origin of elements.* JINA-CEE Frontiers in Nuclear Astrophysics Junior Workshop, May 2018.
10. **Talk.** *Detection of a Population of Carbon-enhanced metal-poor stars in the Sculptor dwarf galaxy.* IAUS 334: Rediscovering the Milky Way, Jul 2017.
9. **Poster.** *Photometric searches for metal-poor stars in the Sculptor and Tucana II dwarf galaxies.* JINA Forging Connections Meeting, Jun 2017.
8. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* First Stars V Meeting, Aug 2016.
7. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* Joint Institute for Nuclear Astrophysics Frontiers Meeting, Apr 2016.

6. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* 3rd Annual GMT Community Science Meeting, Oct 2015.
 5. **Poster.** *Transient Events in Archival VLA Observations of the Galactic Center.* 223rd American Astronomical Society Meeting, Jan 2014.
 4. **Poster.** *Volcanic Effects in the Upper Atmosphere.* American Geophysical Union Fall Meeting, Dec 2013.
 3. **Talk.** *Climate Change in the Upper Atmosphere.* MIT Haystack Observatory Summer REU Presentations, Aug 2013.
 2. **Talk.** *Searching for Radio Transients in the Galactic Center with the VLA.* Cornell University Summer REU Presentations, Aug 2012.
 1. **Poster.** *Infrared Properties of Single-Walled Carbon Nanotubes.* Mid-InfraRed Technologies for Health and the Environment Summer Workshop, Aug 2010.
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TELESCOPE ALLOCATIONS

Magellan/IMACS – Multi-slit spectroscopy, **8 nights as PI**
Magellan/MagE – Single-slit spectroscopy, **6.5 nights as PI**
Magellan/M2FS – Multi-fiber spectroscopy, **1 night as PI**
Magellan/MIKE – Single-slit spectroscopy, **4 nights as Co-I**
Magellan/M2FS – Multi-fiber spectroscopy, **2 nights as Co-I**
SkyMapper – Imaging, **30 hours as Co-I**