

Anirudh Chiti

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Education & Appointments

Kavli Institute for Cosmological Physics, University of Chicago Inaugural Brinson Prize Fellow in Observational Astrophysics	Sep 2021 – Present
Massachusetts Institute of Technology Ph.D. in Physics Thesis: <i>Mapping the Ancient Milky Way and its Relic Dwarf Galaxies</i> Advised by Anna Frebel	May 2021
Cornell University B.A. in Physics <i>Magna Cum Laude</i> and B.A. in Mathematics <i>with Distinction</i> Minor in Astronomy	May 2014

Awards & Honors

IAU Division H PhD Prize , Thesis award from the International Astronomical Union	2022
Henry Kendall Teaching Award , Graduate teaching award in the MIT Physics Department	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 at Cornell	2014
Dean's List, Cornell University , GPA-based award	Fall 2010 – Fall 2013

Competitively Obtained Telescope Time (Selected)

PI, 55.5 nights on CTIO/DECam – Imaging (2023A, 2023B-2026A– PI: the DECam MAGIC Survey)
PI, 13.5 nights on Magellan/IMACS – Imaging (2020A–2022A, 2023B)
PI, 8 nights on Magellan/IMACS – Multi-slit spectroscopy (2015B, 2016A, 2016B, 2018A)
PI, 13 nights on Magellan/MagE – Single-slit spectroscopy (2016B, 2018A–2019B, 2024A)
PI, 1 night on Magellan/M2FS – Multi-fiber spectroscopy (2016A)
PI, 10.5 nights on Magellan/MIKE – Single-slit spectroscopy (2020B–2021B, 2022B, 2023A, 2024A)
Co-I, 6.5 nights on CTIO/DECam – Imaging (2024A, 2024B)
Co-I, 2 nights on Magellan/M2FS – Multi-fiber spectroscopy (2015A)
Co-I, 25 hours on Gemini/GHOST – Single-object Spectroscopy (2024A)
Co-I, 6 hours on Gemini/GMOS – Single-object Spectroscopy (2024A)
Co-I, 30 hours on SkyMapper – Imaging (2017B, 2018A)

Professional Service & Leadership

Organizer, UChicago/Northwestern Galaxy Observers Meeting Series	Jun 2024 – Present
Management Committee, DECam Local Volume Exploration Survey	Aug 2023 – Present
Referee for ApJ, A&A, MNRAS, PASJ	2019 – Present
SOC/LOC member, Dwarf Galaxies, Star Clusters, and Streams in the LSST era	Jul 2024
NOIRLab Time Allocation Committee member	May 2023, May 2024
External Panelist/Subject matter reviewer in four NASA peer reviews	2023 – 2024
Co-organizer, KICP Seminar Series	Sep 2022 – May 2023
Co-organizer, KICP Postdoc Symposium	May 2023
Co-organizer, UChicago/KICP Gaia DR3 Sprint	Jun 2022

Co-organizer, KICP Postdoc Jamboree	Apr 2022
Co-organizer, UChicago/KICP Friday astro-ph discussions	Sep 2021 – Jun 2022
External Reviewer for Gemini Telescope Proposal	Nov 2021
LOC member, JINA-CEE Frontiers in Nuclear Astrophysics Meeting	May 2018

Mentoring & Outreach Experience

Research Projects with undergraduate/graduate students:

Lucas Rayder (Exploring the SMCNOD with MAGIC and APOGEE)	Sep 2024 – Present
Fabricia O. Barbosa (Photometric metallicities of the Sculptor dSph in MAGIC)	Apr 2024 – Present
Ha Do (Narrow-band CaHK imaging of the Jet Stream spur)	Jan 2024 – Present
Kiyan Tavangar (Tidal tails and halos around globular clusters)	Oct 2021 – Present
Xiaowei Ou (Chemistry of the lowest metallicity stars in the Sagittarius dSph) & (Signatures of tidal disruption in the Hercules dwarf galaxy)	May 2024 – Present Sep 2022 – Mar 2024
Yue Pan (Stellar metallicities from DECam <i>u</i> -band photometry)	Oct 2022 – May 2024
Charlie Walsh (Deriving surface gravities from narrow-band photometry)	May 2023 – Aug 2023
Kylie Hansen (Chemical abundances of stars in classical dwarf galaxies)	May 2019 – May 2020
Tatsuya Daniel (Developing a low-metallicity map of the Milky Way)	Aug 2019 – May 2020

Co-organizer, Lifelong learning talk series Sep 2022 – May 2023
Organized twice monthly talks at local libraries and retirement centers

Public Talk: “Searching for the First Stars”, Lifelong learning series Mar, Dec 2022, 2023

Public Talk: “Searching for the First Stars”, Art of Science series Dec 2022

Co-director & Founding member, MIT Sidewalk Astronomy Club Fall 2017 – Aug 2020
Organized 10+ sidewalk stargazing sessions, serving over 400 members of the public

Guest presenter, STEAM Ahead Learning Academy Summer 2019
Helped organize a hands-on spectroscopy demonstration and a solar observing session for rising 5th graders in the STEAM Ahead summer camp, affiliated with Boston Public Schools.

Volunteer, Cambridge Science Festival Spring 2019
Helped organize a hands-on telescope exhibit and solar observing booth as part of the “Science Carnival & Robot Zoo” event of the Cambridge Science Festival.

Volunteer, Latino STEM Alliance Science Festival Spring 2019

Online Project Course Instructor, MIT MOSTEC Summers 2015 – 2018
Instructed an online astrophysics course for rising high school seniors, largely from under-represented or under-resourced communities. Responsibilities included running the course (e.g., curriculum development, administration, developing interactive online teaching sessions), and mentoring students to build toward a final presentation of their independent research projects at MIT. I have taught and mentored over 60 high school students over my four summers in this program.

Conference Workshop Co-Instructor, MIT MOSTEC August 2015, 2017, 2018
Helped design and lead astrophysics workshops in which rising high school seniors analyzed images of a star to derive properties (e.g., orbit, size) of its transiting exoplanet. I held six of these sessions over three summers for groups of 10 to 30 students.

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

Selected Media Coverage

Enrichment by Extragalactic First Stars in the LMC (Chiti et al. 2024), featured on Universe Today, MSN, physics.org, UChicago News, and 58 other outlets.

An Extended Halo around an Ancient Dwarf Galaxy (Chiti et al. 2021), featured on CNN, the Guardian, Sky & Telescope, MIT News, German National Radio, Gizmodo, and 35 other outlets.

Discovery of 18 stars with $-3.10 < [\text{Fe}/\text{H}] < -1.45$ in the Sagittarius dwarf galaxy (Chiti, Hansen & Frebel 2020), featured on phys.org.

Teaching Experience

Guest lecturer, UChicago, ASTR298: Undergraduate Research Seminar	Spring 2022, 2023
Guest lecturer, UChicago, ASTR133: Introduction to Astrophysics	Spring 2022
Graduate Teaching Assistant, MIT, 8.02: Physics II – Electricity & Magnetism	Spring 2020
Graduate Teaching Assistant, MIT, 8.287: Techniques of Optical Astronomy Student rating: 7.0/7.0	Fall 2018
Graduate Teaching Assistant, MIT, 8.287: Techniques of Optical Astronomy Student rating: 6.7/7.0	Fall 2017
Graduate Teaching Assistant, MIT, 8.01: Physics I – Mechanics Student rating: 6.6/7.0	Fall 2016
Graduate Teaching Assistant, MIT, 8.01: Physics I – Mechanics Student rating: 6.4/7.0	Fall 2015
Grader, MIT, 8.902: Astrophysics II	Fall 2015
Undergraduate TA, Cornell University, Fundamentals of Physics II	Spring 2012

Seminars & Colloquia (* = invited)

28. **Uncovering the ancient Milky Way with the DECam MAGIC survey.* University of Maryland Center for Theory and Computation Seminar, USA, Fall 2024.
27. **Uncovering the ancient Milky Way.* University of Michigan Astronomy Colloquium, USA, Sep 2024.
26. **Uncovering the ancient Milky Way.* University of Pittsburgh AstroLunch Seminar, USA, Sep 2024.
25. *Uncovering extended halos around the smallest galaxies.* Columbia Thursday Astronomy Seminar, USA, Nov 2023.
24. **Enrichment by extragalactic first stars in the Large Magellanic Cloud.* STScI Galaxy Journal Club Talk, USA, Nov 2023.
23. *Uncovering the ancient Milky Way.* University of Notre Dame Astronomy Seminar, USA, Nov 2023.
22. **Uncovering extended halos around the smallest galaxies.* KIPAC Tea Talk, USA, Oct 2023.
21. **Uncovering the ancient Milky Way.* Texas A&M Astronomy Seminar, USA, Oct 2023.
20. **Uncovering the ancient Milky Way.* Yale Astronomy Colloquium, USA, Oct 2023.
19. *Uncovering extended halos around ancient dwarf galaxies.* Northwestern/CIERA Observational Group Meeting, USA, May 2023.
18. *Characteristics of the SkyMapper u-band filter and implications for calibration.* LSST Photometric Calibrations Working Group Meeting, USA, Apr 2023.
17. *Uncovering low metallicity stars in the Large Magellanic Cloud.* UChicago Survey Science Seminar, USA, Apr 2023.

16. *Uncovering the most metal-poor stars in the Milky Way's dwarf galaxies– Insights on small-scale galaxy evolution.* NAOJ Subaru/HDS Seminar Series, Japan, Feb 2023.
15. *Mapping the ancient Milky Way.* UChicago Society of Physics Students Seminar Series, Jan 2023.
14. **The most metal-poor stars in the Milky Way's Ultra-faint Dwarf Galaxies.* NASA Cosmic Origins, Stars Science Interest Group Seminar, Oct 2022.
13. *Mapping the ancient stellar populations of the Milky Way and its relic dwarf galaxies.* University of Chicago Astronomy Tuesday Seminar, Sep 2021.
12. **An extended halo around an ancient dwarf galaxy.* IAS astro-coffee, Dec 2020.
11. *A halo of chemically primitive stars around an ancient dwarf galaxy.* University of Chicago Astronomy Tuesday Seminar, Nov 2020.
10. *An extended halo around an ancient dwarf galaxy.* UCSC Friday Lunchtime Astrophysics Seminar, Oct 2020.
9. *An extended halo around an ancient dwarf galaxy.* Yale Galaxy Lunch Talk, Oct 2020.
8. **Discovering the most metal-poor stars in the Milky Way's dwarf galaxies.* SFSU Physics & Astronomy Colloquium, Oct 2020.
7. **A halo of chemically primitive stars around an ancient dwarf galaxy.* University of Michigan Galaxy Group Talk, Oct 2020.
6. *An extended halo around an ancient dwarf galaxy.* Steward/NOAO Galaxy Group Lunch Talk, Sep 2020.
5. *A halo of chemically primitive stars around an ancient dwarf galaxy.* IReNA Online Seminar, Jun 2020.
4. *What did the first galaxies look like?* MIT Physics Department Talk Series, Apr 2020.
3. *Finding the most metal-poor stars in the Milky Way's dwarf galaxies.* STScI Galaxy Journal Club Talk, Nov 2019.
2. *Finding the most metal-poor stars in the Milky Way's dwarf galaxies.* Caltech Astronomy Tea Talk, Oct 2019.
1. *Finding the most metal-poor stars in the Milky Way's dwarf galaxies.* Carnegie Lunch Talk, Oct 2019.

Conference Talks & Posters (* = invited)

**No conferences April 2020 to Winter 2021 due to covid-19*

26. **Talk.** *Early Science from the DECam MAGIC Survey: Mapping the Ancient Galaxy in CaHK.* IAUS 395, Brazil, Nov 2024.
25. **Talk.** *Signatures of Extragalactic First Stars in the Large Magellanic Cloud.* IAU General Assembly, South Africa, Aug 2024.
24. **Talk.** *Signatures of Extragalactic First Stars in the Large Magellanic Cloud.* Small Galaxies, Cosmic Questions II, UK, Aug 2024.
23. **Flash Talk.** *Signatures of Extragalactic First Stars in the Large Magellanic Cloud.* First Stars VII, USA, May 2024.

22. **Talk.** *Signatures of Extragalactic First Stars in the Large Magellanic Cloud.* Galactic Frontiers: Dwarf Galaxies in the Local Volume and Beyond, USA, Jul 2023.
21. **Talk.** *The most metal-poor stars in the Large Magellanic Cloud.* University of Chicago NLTE Workshop, USA, Jun 2023.
20. **Poster.** *Signatures of the First Stars in the Large Magellanic Cloud.* JINA-CEE Frontiers in Nuclear Astrophysics Meeting, USA, May 2023.
19. **Talk.** *High-resolution spectroscopy of stars in the outskirts of the Tucana II dwarf galaxy.* IAUS 379, Germany, Mar 2023.
18. **Talk.** *Detailed chemical abundances of stars in the outskirts of an ancient dwarf galaxy.* IAUS 377, Malaysia, Feb 2023.
17. **Talk.** *Detailed chemical abundances of stars in the outskirts of an ancient dwarf galaxy.* AAS 241st meeting, USA, Jan 2023.
16. **Talk.** *Exploring the outskirts of the Milky Way's ultra-faint dwarf galaxies.* DELVE Collaboration Meeting, USA, Oct 2022.
15. ***Talk.** *Mapping the ancient Milky Way and its relic dwarf galaxies.* International Astronomical Union General Assembly, South Korea, Aug 2022.
14. **Talk.** *A halo of chemically primitive stars around an ancient dwarf galaxy.* JINA-CEE Frontiers in Nuclear Astrophysics Meeting, USA, May 2022.
13. **Talk.** *Detection of a spatially extended population of extremely metal-poor stars in the Tucana II ultrafaint dwarf galaxy.* First Stars VI, Chile, March 2020.
12. **Talk.** *Chemical characterization of dwarf galaxies using SkyMapper photometry.* Stellar Archaeology as a Time Machine to the First Stars Meeting, Japan, Dec 2018.
11. ***Talk.** *Overview talk – Measuring stellar chemical abundances to trace the origin of elements.* JINA-CEE Frontiers in Nuclear Astrophysics Junior Workshop, USA, May 2018.
10. **Talk.** *Detection of a Population of Carbon-enhanced metal-poor stars in the Sculptor dwarf galaxy.* IAU Symposium 334: Rediscovering the Milky Way, Germany, Jul 2017.
9. **Poster.** *Chemical characterization of the Tucana II and Tucana III dwarf galaxies using SkyMapper photometry.* JINA-CEE Frontiers in Nuclear Astrophysics Meeting, USA, May 2018.
8. **Poster.** *Chemical characterization of dwarf galaxies using SkyMapper photometry.* Small Galaxies, Cosmic Questions Conference, UK, Aug 2019.
7. **Poster.** *Photometric searches for metal-poor stars in the Sculptor and Tucana II dwarf galaxies.* JINA Forging Connections Meeting, USA, Jun 2017.
6. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* First Stars V Meeting, Germany, Aug 2016.
5. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* Joint Institute for Nuclear Astrophysics Frontiers Meeting, USA, Apr 2016.
4. **Poster.** *Chemical Abundances of Stars in the Sculptor Dwarf Spheroidal Galaxy.* 3rd Annual GMT Community Science Meeting, USA, Oct 2015.
3. **Poster.** *Transient Events in Archival VLA Observations of the Galactic Center.* 223rd American Astronomical Society Meeting, USA, Jan 2014.
2. **Poster.** *Volcanic Effects in the Upper Atmosphere.* American Geophysical Union Fall Meeting, USA, Dec 2013.

1. **Poster.** *Infrared Properties of Single-Walled Carbon Nanotubes.* Mid-InfraRed Technologies for Health and the Environment Summer Workshop, USA, Aug 2010.

10+ additional internal journal club & graduate student lunch talks at MIT

Publication Record

Summary: 36 total publications; 12 first author papers; 8 second or third author papers; 16 nth author papers. > 1500 total citations (ref: google scholar).

First-author publications:

36. **Chiti, A.**, Mardini, M. K., Limberg, G., Frebel, A., Ji, A. P., Reggiani, H., Ferguson, P., Andales, H. D., Brauer, K. V., Li, T. S., Simon, J. D., *Signatures of Extragalactic First Stars in the Large Magellanic Cloud.* 2024, **Nat Astron**, 8, 637.
35. **Chiti, A.**, Frebel, A., Ji, A. P., Mardini, M. K., Ou, X., Simon, J. D., Jerjen, H., Kim, D., Norris, J. E., *Detailed Chemical Abundances of Stars in the Outskirts of the Tucana II ultra-faint dwarf galaxy.* 2023, **AJ**, 165, 55.
34. **Chiti, A.**, Simon, J. D., Frebel, A., Pace, A. B., Ji, A. P., Li, T. S., *Magellan/IMACS Spectroscopy of Grus I: A low metallicity ultra-faint dwarf galaxy.* 2022, **ApJ**, 939, 41.
33. **Chiti, A.**, Mardini, M. K., Frebel, A., Daniel, T., *The Metal-Poor Metallicity Distribution of the Ancient Milky Way.* 2021, **ApJL**, 911, L23.
32. **Chiti, A.**, Frebel, A., Mardini, M. K., Daniel, T., Ou, X., Uvarova, A. V. *Stellar metallicities from SkyMapper photometry II: Precise Photometric metallicities of $\sim 280,000$ giant stars with $[Fe/H] < -0.75$ in the Milky Way from SkyMapper DR2.* 2021, **ApJS**, 254, 31.
31. **Chiti, A.**, Frebel, A., Simon, J. D., Erkal, D., Chang, L. J., Necib, L., Ji, A. P., Jerjen, H., Kim, D., Norris, J., *An extended halo around an ancient dwarf galaxy.* 2021, **Nat Astron**, 5, 392.
30. **Chiti, A.**, Hansen, K. Y., Frebel, A., *Discovery of 18 stars with $-3.10 < [Fe/H] < -1.45$ in the Sagittarius dwarf galaxy.* 2020, **ApJ**, 901, 164.
29. **Chiti, A.**, Frebel, A. L., Jerjen, H., Kim, D., Norris, J., *Stellar metallicities from SkyMapper photometry I: A study of the Tucana II ultra-faint dwarf galaxy.* 2020, **ApJ**, 891, 8.
28. **Chiti, A.** & Frebel, A. L., *Four Metal-poor Stars in the Sagittarius Dwarf Spheroidal Galaxy.* 2019, **ApJ**, 875, 112.
27. **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.
26. **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.
25. **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.

Second or third-author publications:

24. Cerny, W., **Chiti, A.**, Geha, M., Mutlu-Pakdil, B., Drlica-Wagner, A., Tan, C. Y., Adamow, M., Pace, A. B., Simon, J. D., Sand, D. J. et al. *Discovery and Spectroscopic Confirmation of Aquarius III: A Low-Mass Milky Way Satellite Galaxy.* 2024, arxiv:2410.00981.

23. An, D., Beers, T. C., **Chiti, A.**, *A Blueprint for the Milky Way's Stellar Populations. V. Three-Dimensional Local Dust Extinction.* 2024, **ApJS**, 272, 20.
22. Ou, X., **Chiti, A.**, Shipp, N., Simon, J. D., Geha, M., Frebel, A., Mardini, M. K., Erkal, D., Necib, L., *Signatures of tidal disruption of the Hercules ultra-faint dwarf galaxy.* 2024, **ApJ**, 966, 33
21. Pan, Y., **Chiti, A.**, Drlica-Wagner, A., Ji, A. P., Li, T. S., Limberg, G., Tucker, D. L., Allam, S., *Stellar Metallicities from DECam u-band Photometry: A Study of Milky Way Ultra-Faint Dwarf Galaxies.* 2024, submitted to ApJ, arxiv:2404.08054.
20. Mardini, M. K., Frebel, A., **Chiti, A.**, *An Sr rich ultra metal-poor star in the Atari disc component.* 2024, **MNRAS**, 529, L60.
19. Mardini, M. K., Frebel, A., **Chiti, A.**, Meiron, Y., Brauer, K. V., Ou, X., *The Atari Disk, a Metal-poor Stellar Population in the Disk System of the Milky Way.* 2022, **ApJ**, 936, 78.
18. 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.
17. 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.

Nth-author publications:

16. Tan, C. Y. et al. (inc. **Chiti, A.**). *A Pride of Satellites in the Constellation Leo? Discovery of the Leo VI Milky Way Satellite Galaxy with DELVE Early Data Release 3.* 2024, arxiv:2408.00865.
15. Limberg, G., Ji, A. P., Naidu, R. P., **Chiti, A.**, Rossi, S., Usman, S. A., Ting, Y.-S., Zaritsky, D., Bonaca, A., Borbolato, L., Speagle, J. S., Chandra, V., Conroy, C. *Extending the Chemical Reach of the H3 Survey: Detailed Abundances of the Dwarf-galaxy Stellar Stream Wukong/LMS-1.* 2024, **MNRAS**, 530, 2512.
14. Heiger, M. E., Li, T. S., Pace, A. B., Simon J. D., Ji, A. P., **Chiti, A.**, Bom, C. R., Carballo-Bello, J. A., Carlin, J. L., Cerny, W., Choi, y., Drlica-Wagner, A., James, D. J., Martinez-Vazquez, C. E., Medina, G. E., Mutlu-Pakdil, B., Navabi, M., Noel, N. E. D., Sakowska, J. D., Stringfellow, G. S. *Reading Between the (Spectral) Lines: Magellan/IMACS spectroscopy of the Ultra-faint Dwarf Galaxies Eridanus IV and Centaurus I.* 2024, **ApJ**, 961, 234.
13. Cerny, W. et al. (inc. **Chiti, A.**). *Six More Ultra-faint Milky Way Companions Discovered in the DECam Local Volume Exploration Survey.* 2023, **ApJ**, 953, 1.
12. Oey, M. S., Castro, N., Renzo, M., Vargas-Salazar, I., Suffak, M. W., Ratajczak, M., Monnier, J. D., Szymanski, M. K., Phillips, G. D., Calvet, N., **Chiti, A.**, Micheva, G., Rasmussen, K. C., Townsend, R. H. D., *Strong Variability in AzV 493, an Extreme Oe-type Star in the SMC.* 2023, **ApJ**, 947, 27.
11. Mardini, M. K., Frebel, A., Ezzeddine, R., **Chiti, A.**, Meiron, Y., Ji, A. P., Placco, V. M., Roederer, I. U., Melendez, J., *The chemical abundance pattern of the extremely metal-poor thin disc star 2MASS J1808-5104 and its origins.* 2022, **MNRAS**, 517, 3993.
10. Sand, D. J., Mutlu-Pakdil, B., Jones, M. G., Karunakaran, A., Wang, F., Yang, J., **Chiti, A.**, Bennet, P., Crnojevic, D., Spekkens, K., *Tucana B: An Isolated and Quenched Ultra-faint Dwarf Galaxy at $D=1.4$ Mpc.* 2022, **ApJ**, 935, 17.
9. Yong, D., Da Costa, G. S., Bessell, M. S., **Chiti, A.**, Frebel, A., Gao, X., Lind, K., Mackey, A. D., Marino, A. F., Murphy, S. J., Nordlander, T., Asplund, M., Casey, A. R., Kobayashi, C., Norris, J. E., Schmidt, B. P., *High resolution spectroscopic follow-up of the most metal-poor candidates from SkyMapper DR1.1.* 2021, **MNRAS**, 507, 4102.

8. Yong, D., Kobayashi, C., Da Costa, G. S., Bessell, M. S., **Chiti, A.**, Frebel, A., Lind, K., Mackey, A. D., Nordlander, T., Asplund, M., Casey, A. R., Marino, A. F., Murphy, S. J., Schmidt, B. P., *r-Process elements from magnetorotational hypernovae*. 2021, **Nature**, 595, 223.
7. Wevers, T., Pasham, D. R., van Velzen, S., Miller-Jones, J. C. A., Uttley, P., Gendreau, K. C., Remil-land, R., Arzoumanian, Z., Löwenstein, M., **Chiti, A.**, *Rapid state transitions in a supermassive black hole's accretion flow*. 2021, **ApJ**, 912, 151.
6. Ezzeddine, R., Rasmussen, K., Frebel, A., **Chiti, A.**, Hinojosa, K., Placco, V. M., Beers, T. C., Hansen, T. T., Roederer, I. U., Sakari, C. M., Ji, A. P., Melendez, J., *The R-process Alliance: First Magellan/MIKE Release from the Southern Search for R-Process-enhanced Stars*. 2020, **ApJ**, 898, 150.
5. Nordlander, T., Bessell, M. S., Da Costa, G. S., Mackey, A. D., Asplund, M., Casey, A. R., **Chiti, A.**, Ezzeddine, R., Frebel, A., Lind, K., Marino, A. F., Murphy, S. J., Norris, J. E., Schmidt, B. P., Yong, D., *The lowest detected stellar Fe abundance: The halo star SMSS J160540.18-144323.1*. 2019, **MNRAS**, 488, 1.
4. 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 $[Fe/H] < -6$* . 2019, **ApJ**, 871, 146.
3. 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.
2. 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.
1. 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.