

Yize Dong

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EDUCATION

University of California, Davis

09/2018 - present

PhD in Astrophysics, Dept. of Physics and Astronomy
Thesis Advisor: Stefano Valenti

Xiamen University

09/2013 - 07/2017

B.S. in Astronomy, Dept. of Astronomy, School of Physical Science and Technology.
Thesis Advisor: Wei-Min Gu

RESEARCH TOPICS

- Core-Collapse Supernovae and their progenitors (Type II, SESNe, Type Ibn)
- Thermonuclear Supernovae
- The Precursor of Core-Collapse Supernovae
- Fast Blue Optical Transients

PUBLICATION SUMMARY

5 first author paper (including 1 under review);
35 refereed or submitted publications; 3 of which are Nature papers;
Metrics: >400 total citations, h-index: 14

SOFTWARE INFRASTRUCTURE

DLT40 Pipeline Developer
developed a fast transient broker for UCD group

OBSERVING EXPERIENCES

13 half nights, Optical Spectroscopy, Keck/LRIS
4 half nights, Optical Spectroscopy, Keck/DEIMOS
5 half nights, Nir-Infrared Spectroscopy, Keck/NIRES
5 ToO, Keck/LRIS, Keck/DEIMOS, and Nordic Optical Telescope
Las Combres Observatory Telescope network, Skynet Telescope network

PROPOSALS

P-I: \$39,290/5 triggers on Neil Gehrels Swift Observatory, Cycle 18, “HIGH-CADENCE UV LIGHT CURVES OF EXTREMELY YOUNG SUPERNOVAE”
Co-I: Keck LRIS/DEIMOS, 2020B, 2022A, 2023A and 2023B “Supernova Progenitors from Nebular Spectra”
Co-I: Keck LRIS/DEIMOS ToO, 2022A, 2022B, 2023A, 2023B, “Revealing the nature of fast transients”
Co-I: JWST cycle 1, Cycle 1, “Dust, Mass Loss and Explosions of Massive Stars in the MIR”

ORAL TALKS

- **American Astronomical Society 243rd Meeting** 01/2024
· Invited Talk in Special Session on SN 2023ixf
- **American Astronomical Society 243rd Meeting** 01/2024
· Dissertation Talk: Observational Constraints on the Supernova Progenitors
- **Big Boom talk at Steward Observatory** 10/2023
· Probing The Final-Stage Mass Loss of Massive Stars With Supernovae and Their Precursors

- American Astronomical Society 241st Meeting** 01/2023
· SN 2016dsg: A Thermonuclear Explosion Involving a Thick Helium Shell
- Oral Talk in The Network for Neutrinos, Nuclear Astrophysics, and Symmetries (N3AS) Workshop** 07/2023
· SN 2016dsg: A Thermonuclear Explosion Involving a Thick Helium Shell
- American Astronomical Society 237th Meeting** 01/2021
· Progenitor of Type IIP Supernova 2018cuf
- ePESSTO+ meeting** 09/2020
· Supernova 2018cuf: A Type IIP supernova with a slow fall from plateau.

PROFESSIONAL ACTIVITIES

Invited reviewer for ApJ

Member of Distance Less Than 40 Mpc Survey (DLT40), Global Supernova Project (GSP), and Public ESO Transient Survey (ePESSTO+)

Astronomy On Tap Davis, Davis, CA 2023
How Do We Search For Transients In The Universe?

Instructor for the Pima Community college–DLT40 school 2021 - 2023
gave lectures in using Python coding in Astronomy

SELECTED PUBLICATIONS

Dong, Yize; Valenti, Stefano; Ashall, Chris; Williamson, Marc; Sand, David J. et al. (2023), “SN 2022crv: I Ib, Or Not I Ib: That is the Question”, [arXiv](#), [arXiv:2309.09433](#). (submitted to ApJ)

Dong, Yize; Sand, David J.; Valenti, Stefano; Bostroem, K. Azalee; Andrews, Jennifer E. et al. (2023), “A comprehensive optical search for pre-explosion outbursts from the quiescent progenitor of SN 2023ixf”, [ApJ](#), **957**, 28

Dong, Yize; Valenti, Stefano; Polin, Abigail; Boyle, Aoife; Flörs, Andreas et al. (2022), “SN 2016dsg: A Thermonuclear Explosion Involving a Thick Helium Shell”, [ApJ](#), **934**, 102.

Hosseinzadeh, Griffo; Kilpatrick, Charles D.; **Dong, Yize**; Sand, David J.; Andrews, Jennifer E. et al. (2022), “Weak Mass Loss from the Red Supergiant Progenitor of the Type II SN 2021yja”, [ApJ](#), **935**, 31.

Dong, Yize; Valenti, S.; Bostroem, K. A.; Sand, D. J.; Andrews, Jennifer et al. (2021), “Supernova 2018cuf: A Type IIP Supernova with a Slow Fall from Plateau” [ApJ](#), **906**, 56.

Dong, Yize; Gu, Wei-Min; Liu, Tong; and Wang, Junfeng (2018), “A black hole-white dwarf compact binary model for long gamma-ray bursts without supernova association”, [MNRAS](#), **475**, L101.

The full list of publications can be found here: [PUBLICATIONS](#)

SKILL AND SOFTWARE EXPERIENCES

- Photometric and Spectroscopic Data Reduction
- Python, Matlab, and L^AT_EX

OTHER ACTIVITIES

- First Violin in UC Davis Symphony Orchestra
- First Erhu in UC Davis Chinese Orchestra

REFERENCES

- Stefano Valenti, Associate Professor, University of California, Davis, valenti@ucdavis.edu
- David Sand, Associate Professor, University of Arizona, dsand@as.arizona.edu
- Jennifer E. Andrews, Assistant Astronomer, Gemini Observatory, jennifer.andrews@noirlab.edu