# JOEL C. ZINN

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## **EDUCATION**

# Ohio State University

Ph.D. in Astronomy M.S. in Astronomy

August 2014 - May 2019 December 2016

# **Princeton University**

B.A. in Astrophysical Sciences, magna cum laude Minor in Theatre June 2013

# PUBLICATIONS (ADS)

- **Zinn, J. C.**; Pinsonneault, M. H.; Huber, D.; Stello, D.; Stassun, K; Serenelli, A., *Testing the radius scaling relation with* Gaia *DR2 in the* Kepler *field*, ApJ, 2019, submitted
- **Zinn, J. C.**; Pinsonneault, M. H.; Huber, D.; Stello, D. Confirmation of the Gaia DR2 parallax zero-point offset using asteroseismology and spectroscopy in the Kepler field, ApJ, Volume 878, Issue 2, (2019) (arXiv:1805.02650)
- Sharma, S.; Stello, D.; Bland-Hawthorn, J.; Hayden, M. R.; **Zinn, J. C.**; (+ 32 additional authors), *The* K2-*HERMES survey: age and metallicity of the thick disk*, MNRAS, 2019, submitted
- **Zinn, J. C.**; Stello, D.; Huber, D.; Sharma, S., Bayesian Asteroseismology data Modeling Pipeline and its application to K2 data, ApJ, 2018, submitted.
- Buder, S.; (+ 40 additional authors); **Zinn, J. C.**; and Žerjal, M., *The GALAH survey: second data release*, MNRAS, Volume 478, Issue 4, 2018 (arXiv:1804.06041)
- Hon, M.; Stello, D.; and **Zinn, J. C.**, Detecting solar-like oscillations in red giants with deep learning, ApJ, Volume 859, Issue 1, 2018 (arXiv:1804.07495)
- Abolfathi, B.; (+ 345 additional authors); **Zinn, J. C.**; and Zou, H., The fourteenth data release of the Sloan Digital Sky Survey: first spectroscopic data from the Extended Baryon Oscillation Spectroscopic Survey and from the second phase of the Apache Point Observatory Galactic Evolution Experiment, ApJS, Volume 235, Issue 2, 2018 (arXiv:1707.09322)
- Albareti, F. D.; (+ 341 additional authors); **Zinn, J. C.**; and Zou, H., The 13<sup>th</sup> data release of the Sloan Digital Sky Survey: first spectroscopic data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory, ApJS, Volume 233, Issue 2, 2017 (arXiv:1608.02013)

Zinn, J. C.; Huber, D.; Pinsonneault, M. H.; Stello, D., Evidence for spatially-correlated Gaia parallax errors in the Kepler field, ApJ, Volume 844, Issue 2, 2017 (arXiv:1706.09416)

Huber, D.; **Zinn, J. C.**; et al. (+ 18 additional authors) Asteroseismology and Gaia: testing scaling relations using 2200 Kepler stars with TGAS parallaxes, ApJ, Volume 844, Issue 2, 2017 (arXiv:1705.04697)

**Zinn, J. C.**; Kochanek, C. S.; et al. (+ 12 additional authors), Variable classification in the LSST era: exploring a model for quasi-periodic light curves, MNRAS, Volume 468, Issue 2, 2017 (arXiv:1612.04834)

Kennedy, M. R.; Callanan, P.; Garnavich, P. M.; Fausnaugh, M.; **Zinn, J. C.**, XMM-Newton observations of the peculiar cataclysmic variable Lanning 386: X-ray evidence for a magnetic primary, MNRAS, Volume 466, Issue 2, 2017 (arXiv:1612.04397)

Stello, D.; **Zinn, J. C.**; et al. (+ 12 additional authors), *The* K2 *Galactic Archaeology Program Data Release 1: asteroseismic results from Campaign 1*, ApJ, Volume 835, Issue 1, 2017 (arXiv:1611.09852)

More, A.; Oguri, M.; Kayo, I.; **Zinn, J. C.**; et al. (+ 14 additional authors), *The SDSS-III BOSS quasar lens survey: discovery of 13 gravitationally lensed quasars*, MNRAS, Volume 456, Issue 2, 2016 (arXiv:1509.07917)

Slepian, Z.; Gott, R.; and **Zinn, J. C.**, A one-parameter formula for testing slow-roll dark energy: observational prospects, MNRAS, Volume 438, Issue 3, 2014 (arXiv:1301.4611)

(+ 493 additional authors); **Zinn, J. C.**, The ninth data release of the Sloan Digital Sky Survey: first spectroscopic data from the SDSS-III Baryon Oscillation Spectroscopic Survey, ApJS, Volume 203, Issue 2, 2012 (arXiv:1207.7137)

## PROFESSIONAL SERVICES, ACTIVITIES, AND RECOGNITION

AAS Doxsey Travel Prize 2019

Ann S. Tuttle Citizenship, Engagement, and Outreach Prize 2018

Kavli Institute for Theoretical Physics Graduate Fellowship 2019

Junior Member, American Astronomical Society 2016 - Present

#### RECENT PRESENTATIONS

AAS 233 January 2019

Self-consistent radius and distance scales from red giant asteroseismology using K2, Kepler, and Gaia

SDSS-IV Collaboration Meeting

June 2018

APOKASC-Gaia self-consistency, Round II: mutually testing scaling relations and parallax systematics with the second data releases of APOKASC and Gaia (contributed talk)

Galactic Archaeology, Kepler & K2 Science Conference IV

Mind the GAP: a 360 degree view of the Galaxy with the K2 Galactic Archaeology

Program (contributed talk)

Galactic Archaeology with Kepler and K2, AAS 229

K2 red giant asteroseismology with Bayesian Asteroseismology data Modeling (BAM)
(invited talk)

#### PUBLIC OUTREACH

Show presenter and designer, Ohio State University planetarium 2014 – 2019
Organizer, Astronomy on Tap (informal lectures at local bars) 2015 – 2016

# TEACHING AND MENTORING

Life in the universe, Head lab instructor, Ohio State University

2014

Krisann Stephany, Ohio State University Astronomy undergrad May 2018 – Present Supervised her development of a planetarium show, "Origin of the elements", and aligning its content to national education standards. Collaborated with local teachers for her to create and implement a middle school module based on the show.

## **OBSERVING EXPERIENCE**

LBT Observatory, Large Binocular Telescope

June 2016

Instrument: Multi-Object Double CCD Spectrograph/Imager; Large Binocular Camera; LUCI (infrared spectrograph/imager)

Description: Ohio State queue observing — 88 hours

MDM Observatory, 2.4m Hiltner Telescope

September 2015

Instrument: Ohio State Multi-Object Spectrograph (Blue) Description: Ohio State queue observing — **88 hours** 

MDM Observatory, 2.4m Hiltner Telescope

June 2015

Instrument: Ohio State Multi-Object Spectrograph (Red)

Description: Deep imaging and spectroscopy of lens candidates, **Principal Investi-**

gator — 24 hours

#### PROFESSIONAL SERVICES AND ACTIVITIES

Junior Member, American Astronomical Society

2016 - Present

Member, Sigma Xi

2013 - Present

#### TECHNICAL STRENGTHS

LanguagesPython, bash, IDL, Cython, Fortran, HTMLToolsLatex, Emacs, Starry Night, Scidome, git