

# Alexander Andres Lazar

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## CONTACT INFORMATION

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## EDUCATION

### The University of California, Irvine

Ph.D. in Physics

2018 - Present

Thesis: The Nature of Dark Matter Through Gravitational Anomalies

Advisor: James S. Bullock

### The University of Texas at Austin

B.Sc., Physics & Astronomy

2015 - 2018

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## PREPRINTS & PUBLICATIONS

*A Dark Matter Profile to Model Diverse Feedback-Induced Core Sizes of  $\Lambda$ CDM halos*

**A. Lazar**, J. Bullock, M. Boylan-Kolchin, and FIRE Collaboration (2020); preparing for submission

*Out of sight, Out of Mind? The Impact of Correlated Structure Along Line-of-sight Measurements in CDM*

**A. Lazar**, J. Bullock, and M. Boylan-Kolchin (2020); preparing for submission

*Accurate Mass Estimates from the Proper Motions of Dispersion-Supported Galaxies*

**A. Lazar** and J. Bullock (2020); Submitted to MNRAS (arXiv:1907.08841)

*Dark and Luminous Satellites of LMC-mass Galaxies in the FIRE Simulations*

E. Jahn, L. Sales, A. Wetzel, M. Boylan-Kolchin, T.K. Chan, K. El-Badry, **A. Lazar**, J. Bullock (2019); MNRAS, 489, 5348 (arXiv:1907.02979)

## RECENT TALKS

*Inner Dark Matter Densities Constructed from 3D Proper Motions*  
GalFRESCA 2019; Irvine, CA

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## TEACHING EXPERIENCE

### The University of California, Irvine

*Graduate Teaching Assistant*

Physics 20B: Cosmology: Humanity's Place in the Universe

Spring 2019

Physics 3B: Basic Physics II

Winter 2019

Physics 52A: Fundamentals of Experimental Physics

Fall 2018

Physics 116: Relativity and Blackholes

Fall 2018

### The University of Texas at Austin

*Undergraduate Teaching Assistant*

AST 301: Introduction to Astronomy

Fall 2017, Spring 2018

PHY 353L: Modern Physics Laboratory

Summer 2017, Spring 2018

PS 303: Mechanics and Heat

Spring 2017, Fall 2017, Spring 2018

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