Curriculum Vitae

ALEX FITTS

Mailing Address: Department of Astronomy, University of Texas at Austin, Austin, TX 78712

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Education

• University of Texas at Austin—Austin, TX (2015-Present)

Ph.D. Candidate since April, 2016

Projected Ph.D. Date: May, 2018

• University of Maryland—College Park, MD (2012-2015)

Masters degree in Astrophysics, May 2014

• University of Connecticut Storrs—Storrs, CT (2008-2012)

Honors B.S. degree in Physics, cum laude, May 2012

Experience

• University of Texas at Austin—Austin, TX

Graduate Student, Advisor: Mike Boylan-Kolchin: May 2015-present

- Currently simulating cosmological zoom-in simulations of dwarf galaxies in an attempt to address the small scale issues of ΛCDM
- University of Maryland—College Park, MD

Graduate Student, Advisor: Mike Boylan-Kolchin: May 2012-2014

- Completed 2nd Year Project: *A resolution and parameter space study of low frequency oscillations in 3D global accretion disk simulations.*
- Harvard-Smithsonian Center for Astrophysics—Cambridge, MA

Visiting Student, worked under Vasili Kharchenko: June 2011–March 2012

- Created a spatial distribution computer model of a cometary atmosphere for my Senior Thesis. Explored how photo-desorption directly affects the production rate of certain mother molecules.
- Phillip Gould's UCONN Lab—Storrs, CT

Undergrad research: February, 2010-June, 2011

 Actively mode-locked a semiconductor laser diode through RF modulation of the laser diode's drive current. Our goal was to create a pulsed laser with pico-second long pulses.

Skills

- Computer Languages and Programs:
 - Proficient in C, Python, LATEX, Mathematica, MPI, OpenMP
 - Familiar with MatLab, Origin, CAD

Selected Achievements and Activities

- Invited to attend the International High Performance Computing Summer School in Solvenia in June 2016
- Recognized as a Distinguished Graduate Student Teacher 2013-2014
- UCONN Honor's Program, including a Senior Thesis detailing my cometary model
- Inducted into the Physics Honors Society in Spring 2011.
- Member of the American Astronomical Society and the Americal Physical Society