

R. MICHAEL JENNINGS

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michaeljennings11.github.io

EDUCATION

University of California, Berkeley

August 2018 - Present

B.A. Physics (In Progress)

B.A. Astrophysics (In Progress)

Advisors: Yuan Li, Eugene Chiang, Eliot Quataert

Berkeley, CA, GPA: 3.622

Diablo Valley College

January 2016 - July 2018

A.S. Physics

A.S. Mathematics

Certificate of Achievement in C++ Programming

Certificate of Achievement in Japanese Language

Pleasant Hill, CA, GPA: 3.835 *Honors*

RESEARCH EXPERIENCE

Determining Spin Axes of Fragments Formed Within Gravitationally Unstable Self-Gravitating Disks (*Honors Thesis*)

Advisor: Eugene Chiang

August 2020 - Present

Simulating Mixing Layers in the ISM through the Kelvin-Helmholtz Instability

As ULab Mentor

September 2019 - May 2020

Simulating Thermal Instability and Multiphase Gas in the Interstellar Medium

Advisors: Yuan Li, Eliot Quataert

January 2019 - Present

PUBLICATIONS

[2] **Jennings, R. M.**; Chiang, E.; *Spin Axes of Fragments Formed Within Gravitationally Unstable Self-Gravitating Disks*, in prep

[1] **Jennings, R. M.**; Li, Y.; Quataert, E.; *Thermal Instability and Multiphase Gas In The Interstellar Medium*, in prep

POSTERS AND OTHER WRITINGS

[4] Lee, M.; **Jennings, R. M.**; *Large Scale Structure Evolution With Various Cosmologies: Exploring Cosmological Simulations*, ASTRON C161 Final Project, Berkeley, CA, May 2020. (class project)

[3] Sunseri, J.; Tausik, N.; Zezulka, S.; Wellnitz, G.; Lera, I.; Deak, B.; Chan, T. Y.; **Jennings, R. M.**; *Computational Analysis of Mixing Layers in the Interstellar Medium*, ULab poster session, Berkeley, CA, May 2020. (poster)

[2] **Jennings, R. M.**; Li, Y.; Quataert, E.; *Thermal Instability In The Interstellar Medium And The Implementation of Anisotropic Conduction in Athena++*, Astronomy Poster Summer Intern Symposium, Berkeley, CA, August 2019. (poster)

[1] Mo, S.; Raizada, S.; Ott, J.; Dicks, P.; Kofford, S.; **Jennings, R. M.**; *Interplanetary Radiation Harnessing Voltaic System*, ULab poster session, Berkeley, CA, May 2019. (poster)

TEACHING AND WORK EXPERIENCE

Mentor, ULab Theoretical Astrophysics Group

University of California, Berkeley

September 2019 - May 2020

Mentor, ULab Particle Physics Group

University of California, Berkeley

September 2018 - May 2019

Technician, Physics Laboratory

Diablo Valley College

February 2017 - June 2018

Astronomy Tutor

Diablo Valley College

August 2016 - May 2018

SKILLS

Computer Languages

C/C++, Python, Linux/Unix, L^AT_EX, bash, git, HTML, CSS

Parallel Computing

MPI, OpenMP

Software

Athena/Athena++, Enzo, yt

Supercomputing

NASA Pleiades, UCB Savio

SERVICE AND OUTREACH

Observatory Deck Docent and Telescope Operator

Chabot Space and Science Center, Oakland

August 2017 - December 2017

AWARDS AND SCHOLARSHIPS

James Monroe McDonald Scholarship

2020-2021

Ensign-Hornbeck Scholarship

2020-2021

DLMC Foundation Scholarship

2020-2021

George A. Douglass Scholarship

2019-2021

Albert L. Ehrman Memorial Scholarship

2019-2020

Odell Wilson Scholarship

2019-2020

REFERENCES

Yuan Li

Professor, Department of Physics, University of North Texas

Email: yuan.li@unt.edu

Eugene Chiang

Professor, Department of Astronomy & Department of Earth and Planetary Science

Email: echiang@astro.berkeley.edu