

## William J. Ryan

### PRESENT ADDRESS

522 14th ave.  
Santa Cruz, CA 95062  
(831) 428-6558

### JOB OBJECTIVE

Graduate Student

### EDUCATION

University of California Santa Cruz, Santa Cruz, CA  
Pursuing Bachelor of Physics, June 2021  
Physics Major G.P.A 3.61/4.0  
Pursuing Bachelor of Computational Mathematics, June 2021  
Computational Mathematics Major G.P.A 3.45/4.0

### WEBSITE

<https://wjryan.github.io/William-J-Ryan/>

- This website contains a manual I wrote for the Fermipy suite of tools used in my undergraduate research. It is a work in progress but it is meant to teach the basics for future users.

### EXPERIENCE

<b>Undergraduate Research</b>	David Williams and Olivier Hervet UC Santa Cruz, CA	2019-Present
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I am working with Professor David Williams high-energy astrophysics group at UC Santa Cruz and analyzing the high-energy astrophysical source Markarian 421, a super massive black hole with particle jets pointed towards Earth, using eleven years of gamma-ray data from the Fermi-LAT space telescope. The goals of the study are to accurately reconstruct the energy flux in one-day and two-day time bins and to probe the results for patterns that may shed light on jet structure.

<b>Business Manager</b>	Ohana Gymnastics Santa Cruz, CA	Summer 2018-2019
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I was in charge of hiring and training staff, and I built a recreational gymnastics curriculum for ages 5 to 16 in order to revitalize a stagnant program. I Increased enrollment from 30 to 130 in three months and pushed the business into the black. In summer 2019 I passed on the responsibilities to a new manager so I could pursue my college education and gymnastics career more rigorously.

<b>College Gymnast</b>	Northern California United CA	2017-2020
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I am a founding Member of Northern California United, a self-funded college gymnastics team competing under NCAA rules and competing against NCAA teams but under the umbrella organization gym-ACT. I competed in my Freshmen, Sophomore, and Junior year and was team captain for all three seasons.

<b>Gymnastics Coach</b>	Ohana Gymnastics and Woodward West Santa Cruz CA and Tehachapi CA	2018-2019
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I coached for Ohana Gymnastics, and in summer 2018 and summer 2019 I coached athletes ages 10 to 30 at Woodward West action sports camp. I worked with and learned from the olympians Dmitry Bilozerchev, Jason Gatson, Betty Okino, Danell levya, Jonathan Horton, Brazilian national team member Fabricio Olsson, and Region One's Northern California state Chairwoman Michelle Huffman.

**Camp Counselor**

Woodward West  
Tehachapi CA

Summers 2017-2019

For three summers I counseled male gymnasts ages 10 to 16. For many kids this week long overnight camp is their first time away from home without parental supervision. I made sure they took showers, brushed their teeth, and remained civil human beings.

**COMPUTER SKILLS**

- Proficient programming skills in PYTHON, HTML, and LATEX
- Proficient experience in Adobe Photoshop and Adobe Illustrator

**HONORS AND AWARDS**

- Ron Ruby scholarship award for undergraduate research
- Dean's Honors List: 2018 Fall - 2019 Spring
- All American Award from the College Gymnastics Association in 2019

**EXTRACURRICULAR ACTIVITIES**

- Reading: Favorite books include
  - The *Kingkiller Chronicle* by Patrick Rothfuss
  - The *Hyperion Cantos* by Dan Simmons
  - *Dictator* by Robert Harris
- Drawing
- Weight Lifting
- Gymnastics