

# EDUARDO ELIHU MUNGUÍA-GONZÁLEZ

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## EDUCATION

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### Universidad de Colima

2015-2019

Bachelor of Science in Physics

### edX, Inc. (MOOC platform)

Used edX.org, a massive open online course (MOOC) platform, to take physics courses offered by accredited universities, including MIT, to reinforce my knowledge of various topics and to further my education. See list of the most relevant courses below.

- **Mastering Quantum Mechanics** (8.05x)

Massachusetts Institute of Technology

Fall 2019

- **Quantum Mechanics** (8.04x)

Massachusetts Institute of Technology

Fall 2018

- **Vibrations and Waves** (8.03x)

Massachusetts Institute of Technology

Spring 2020

- **Electricity and Magnetism** (8.02x)

Massachusetts Institute of Technology

Spring 2018

- **Classical Mechanics** (8.01x)

Massachusetts Institute of Technology

Fall 2017

## RESEARCH EXPERIENCE

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### University of California, Santa Cruz

2021

Postbaccalaureate researcher

Santa Cruz, CA, USA

- Prof. [Enrico Ramirez-Ruiz](#) and I are studying the formation of radio-quiet neutron star - light black hole binary systems by conducting 3D SPH simulations of supernova explosions of massive helium stars using GADGET-2.

### Georgetown University

2020

Postbaccalaureate researcher

- Prof. [James K. Freericks](#) and I studied squeezed-coherent states and developed a new way of computing their wavefunction by using operator methods only.

### Instituto de Astronomia - Universidad Nacional Autonoma de Mexico

2017-2018

Undergraduate thesis student

Ensenada, Mexico

- Prof. [Luis Aguilar Chiu](#) and I studied the encounter between the star Gliese 710 and our Sun and simulated this event in order to determine the effect on the population of comets in the Oort cloud.

## CONFERENCES AND SELECTED PRESENTATIONS

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### 2021 SACNAS NDiSTEM Digital Conference

October 2021

Poster presenter

- This is a conference organized by [SACNAS](#) where I will be presenting my research work developed throughout the summer at UC Santa Cruz.

## 69th Lindau Nobel Laureate Meeting

*Young Scientist*

June 2019

*Lindau, Germany*

- This is an event where around 40 Nobel Laureates in physics convene at Lindau for one week to meet the next generation of leading scientists: 500-600 qualified undergraduates, PhD students and post-docs from 89 countries.

## 22nd Pacific International Conference on Scientific Research

*Oral presenter*

September 2017

*Nayarit, Mexico*

- This is a conference organized by *Consejo Nacional de Ciencia y Tecnología (CONACYT)* and *Programa Delfin* where I presented my research work developed throughout my internship at the UNAM.

## FELLOWSHIPS AND AWARDS

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### Lamat Fellowship

2021

- [Lamat](#) is an NSF-REU program designed to introduce students to astrophysical research methods and tools through original projects in computational astrophysics.

### Online Sciathon 2020 (Lindau Nobel Laureate Meetings)

2020

- Hackathon-style online competition where Lindau alumni and young scientists from 87 countries worked on an interdisciplinary project during 48 hours. My team (Group Elmiger) created a webinar platform to make research seminars more accessible to people around the world. [We placed third.](#)

### Peña Colorada Prize

2019

- Prize awarded by the Government of Colima and the University of Colima to the undergraduate student from class of 2019 with the highest final average grade in their field of study.

### Fundacion Telmex-Telcel Scholarship

2015–2019

- Scholarship awarded to Mexican undergraduate and graduate students with academic excellence and distinguished extracurricular activities.

### Programa Delfin Fellowship

2017

- Fellowship awarded to Latin American undergraduate students to develop a research project in universities around the world.

## PUBLICATIONS

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1. **E. Munguía-González**, S. Rego, and J. K. Freericks, “*Making squeezed-coherent states concrete by determining their wavefunction*”, *Am. J. Phys.*, **89**, 885 (2021). [\[Publisher\]](#) [\[arXiv\]](#)

## OTHER ACTIVITIES

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### researchseminars.org

2020

*Contributor*

Since July 2020, [Group Elmiger](#) has partnered with [researchseminars.org](#) to support this initiative and expand its remit to include more disciplines, in order to achieve the goals of our project.