Diyaselis DELGADO

Ph.D. Student | Experimental High Energy Physics

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Graduate student and research associate in the Laboratory for Particle Physics and Cosmology (LPPC) at Harvard University, in Professor Carlos Argüelles-Delgado's group. Currently working in the IceCube Neutrino Observatory at the South Pole, with interests in neutrino phenomenology and Dark Matter studies.

🎓 EDUCATION

2020 - Present	Ph.D. in Experimental High Energy Physics, **Harvard University**
2015 - 2020	B.Sc. in Theoretical Physics and Applied Mathematics, **University of Puerto Rico - Mayagüez**

💼 PROFESSIONAL EXPERIENCE

Present
September 2020
Research Assistant | HARVARD UNIVERSITY, MA, USA
> Under supervision of Professor Carlos Argüelles Delgado.

Neutrino Physics | Astrophysics | *HEP* - Phenomenology | *BSM* | Dark Matter

August 2019
May 2019
Research Assistant | CORNELL UNIVERSITY, NY, USA
> Under the supervision of Professor Jim Alexander, as part of the CLASSE-REU program.

HEP - Experimental | Detector Physics | Hardware

December 2018
June 2018
Research Assistant | CERN, Geneva, Switzerland
> Under the supervision of Dr. Kati Lassila-Perini, as part of the CERN Non-Member State Summer Student program.
> Working period of September to December was sponsored by the University of Michigan - Ann Arbor CERN REU program.

HEP - Experimental | Open-Data Analysis | Software Development

May 2020
August 2017
Research Assistant | UNIVERSITY OF PUERTO RICO - MAYAGÜEZ, PR, USA
> Under the supervision of Professor Sudhir Malik.

HEP - Experimental | CMS | *BSM* | Analysis | Software Development | Machine Learning

🏆 AWARDS AND SCHOLARSHIPS

2022	**Scholarship**, Jens Aubrey Westengard Scholarship, HARVARD UNIVERSITY, MA, USA
2022	**Scholarship**, Leon Rosenfeld Foundation, NIELS BOHR INSTITUTE, COPENHAGEN, DENMARK
2022	**Grant**, International Conference on High Energy Physics (ICHEP), BOLOGNA, ITALY
2020	**Fellowship**, Harvard Graduate School of Arts and Sciences Prize Fellowship, MA, USA
2020	**Award**, Enrico Fermi Award, DEPARTMENT OF PHYSICS, U. PUERTO RICO, MAYAGÜEZ, PR, USA
2019	**Scholarship**, Retired Professor's Association (ACJ) Scholarship, MAYAGÜEZ, PR, USA
2017	**Scholarship**, Retired Professor's Association (ACJ) Scholarship, MAYAGÜEZ, PR, USA

👥 COMMUNITY INVOLVEMENT AND OUTREACH

> **IceCube Diversity Taskforce Member**, IceCube Collaboration.
> **IAIFI Affiliate Member**, NSF AI Institute for Artificial Intelligence and Fundamental Interactions.
> **IceCube Collaboration MasterClass (English & Spanish)**, Outreach activity for students.
  ○ Los Amigos Middle School, Cambridge, MA (MAY 2022)
> **Women in Physics Member**, Harvard University Chapter
> **SACNAS Affiliate Member**, Society for Advancement of Chicanos/Hispanics & Native Americans in Science.
  ○ Outreach and Recruitment Involvement for Harvard University.

📓 TEACHING EXPERIENCE

Present
September 2022
Undergraduate Level Teaching Assistant | HARVARD UNIVERSITY, MA, USA
> I was a teaching assistant of the following PHYSICS classes:

Introductory Electromagnetism and Statistical Physics

May 2020 January 2018	**Undergraduate Level Teaching Assistant** | University of Puerto Rico - Mayagüez, PR, USA ❯ I was a teaching assistant of the following General Science classes: Calculus · General and Advanced Physics · Probability and Statistics · Computational Techniques in Science and Engineering

🖥 Conferences and Workshops

Invited Talks and Seminars

Dark Ghosts, University of Granada, Granada, Spain Parallel Talk — March 2022

Talks and Seminars

TeVPa, Queen's University, Kingston, Canada Parallel Talk — August 2022

NBIA Neutrino Summer School, Niels Bohr Institute, Copenhagen, Denmark Seminar Talk — July 2022

APS April Meeting, New York City, NY, USA Parallel Talk — April 2022

TeVPa (Online), Chengdu, China Parallel Talk — December 2021

ComHEP (Online), Chengdu, China Parallel Talk — December 2021

CMSDAS, Fermi National Laboratory (Fermilab), Batavia, IL, USA Parallel Talk — January 2020

Physics Symposium, University of Puerto Rico, Mayagüez, PR, USA Plenary Talk — September 2019

JTM/PRISM Conference, University of Puerto Rico, Mayagüez, PR, USA Parallel Talk — May 2019

CERN Student Symposium, CERN, Geneva, Switzerland Parallel Talk — December 2018

Poster Sessions

ICHEP, Bologna, Italy — July 2022

Neutrino 2022 (Online), Seoul, South Korea — May 2022

AstroDark (Online), Kavli IPMU, Tokyo, Japan — December 2021

SPS PhysCon, Providence, RI, USA — November 2019

APS April Meeting, Denver, CO, USA — April 2019

APS CUWiP Meeting, Northwestern University, Evanston, IL, USA — January 2019

CERN Summer Student Poster Session, CERN, Geneva, Switzerland — August 2018

📑 Peer-reviewed Publications

Selected Publications in Particle Physics

Searches for Connections between Dark Matter and High-Energy Neutrinos with IceCube, Preprint arXiv: 2205.12950. IceCube Collaboration. Submitted to JCAP.
Contribution: Reviewed and edited plots and content for final draft submission.

Selected Publications in Astrophysics and Astroparticle Physics

Dark Matter decay to neutrinos, Pending arXiv. C.A. Argüelles, D. Delgado, A. Friedlander, A Kheirandish, I. Safa, A.C. Vincent, and H. White.
Contribution: Computed the galactic contribution from gamma-ray experiments; aided the galactic computation of the neutrino experiments.