EZEQUIEL ZUBIETA

ezequielzubietaa1@gmail.com / ezubieta@iar.unlp.edu.ar

EDUCATION

Argentine Institute of Radio astronomy (IAR)   March 2022 - Present
PhD student on Astronomy.   *La Plata - Buenos Aires*

Advisor: Dr. Federico Garcia, Co-advisor: Dr. Santiago del Palacio.

University of Buenos Aires   2016 - 2022
Diploma on Physics (Licenciatura en Ciencias Físicas)   *Autonomous City of Buenos Aires*

Duration of 6 years

GPA: 4.0 (9.57/10)

RESEARCH EXPERIENCE

Member of PuMA Collaboration (Pulsar Monitoring in Argentina)   March 2021 - Present
· http://puma.iar.unlp.edu.ar/

Pulsar monitoring and glitch analysis   March 2021 - Present
· Final thesis of the Diploma in Physics under the supervision of Dr. Jorge Combi (IAR) and Dr. Federico Garcia (IAR) in the Pulsar Monitoring Argentina(PuMA) group.

Design and construction of a microscope for the implementation of the iSCAT technique to study mass transport in azo-polymers   March 2020 - March 2021
· Undergrad experimental research under the supervision of Dr. María Gabriela Capeluto in the Laboratorio de Óptica y Fotónica (LOFT) at the University of Buenos Aires.

PARTICIPATION IN CONFERENCES

ARGOS: Science Priorities for a European Wide-Field Radio Interferometer   2023
· Oral contribution: High-cadence pulsar monitoring from the Argentine Institute of Radio astronmy. E. Zubieta

NANOGrav Fall meeting   2023
· Oral contribution: Monitoring PSR J0437-4715 from Argentina. E. Zubieta

International Pulsar Timing Array (IPTA) meeting   2023
· Oral contribution: Pulsar Monitoring Campaign in Argentina. E. Zubieta

Prospects for Low Frequency Radio Astronomy in South America   2022
· Oral contribution: "First glitches detected from the Argentine Institute of Radio astronomy". Ezequiel Zubieta

64 Meeting of the Asociación de Astronomía Argentina   2022
· Oral contribution: "PuGli-S: First glitches detected from the Argentine Institute of Radio astrronomy". Ezequiel Zubieta

63 Meeting of the Asociación de Astronomía Argentina   2021
· Oral contribution: "Detection of a glitch in PSR 1048-5832". Ezequiel Zubieta

TOPFOT, Comité territorial de Óptica (Argentina)   2021
· Poster presentation: 'Implementation of iSCAT technique to determine dynamics of mass transport in azo-polymers.' Cruz Ignacio Velasco, Ezequiel Zubieta, María Gabriela Capeluto

105 Reunion of the Asociación Física Argentina   2021
· Optics and Photonics division, Short Lecture Cycle: 'Development of an instrument for the study of mass transport in azo-polymers employing scattering in nano-particles'. Cruz Ignacio Velasco, Ezequiel Zubieta, María Gabriela Capeluto.

PARTICIPATION IN SCHOOLS AND WORKSHOPS

NANOGrav's Student Introductory Workshop

2023: Green Bank Telescope Training Workshop - Green Bank Observatory

2023: Single Dish Summer School - Green Bank Observatory

2023: Giambiagi Cosmology School - Universidty of Buenos Aires

2023: International Pulsar Timing Array (IPTA) student workshop

2023: São Paulo Advanced School on Multi-Messenger Astrophysics - Principia Institute

PUBLICATIONS

Updates on the glitching pulsar monitoring campaign performed from IAR. E. Zubieta, et. al.; RevMexAA(SC), Vol. 56, 2023 (accepted).

First results of the glitching pulsars monitoring program at the Argentine Institute of Radioastronomy; E. Zubieta, et. al.; MNRAS, Vol. 521, Issue 3, pp.4504-4521, 2023.

PuGli-S: First glitches detected from IAR; E. Zubieta, et. al.; BAAA, Vol. 64.

Detection of a glitch in PSR J1048-5832 from IAR; E. Zubieta, et. al.; BAAA, Vol. 63, 2022 (262-264).

NON-REFEREED PUBLICATIONS

Gravitational waves detection with pulsar observations; Boletín radioastronómico N. 82; Argentine Institute of Radio astronomy; 2023

Detection of a new glitch in the pulsar PSR J1740-3015: Atel 15838. E.Zubieta (IAR) et. al., on behalf of the PuMA Collaboration.

Confirmation of glitch event observed in PSR J0742-2822 at the Argentine Institute of Radioastronomy (IAR): Atel 15638. E. Zubieta (IAR) et. al., on behalf of the PuMA Collaboration.

A new Glitch in the Vela Pulsar (PSR B0833-45/PSR J0835-4510): ATel 14806. V. Sosa-Fiscella (IAR, ARG - RIT, USA) et. al. on behalf of the PuMA Collaboration.

AWARDS AND FELLOWSHIPS

PhD CONICET Research Fellow (National Research Council). Topic: Pulsar timing and glitch analysis. Advisor: Dr. Jorge Ariel Combi, Co-advisor: Dr. Carlos Loustó.   April 2022 - Present

Undergraduated research training fellowship; Argentine Astronomy Association; January 2022 - March 2022.

Santander award for academic merit   2019, 2020, 2021, 2022.

Math Olympics Argentina; distinguished mention   2014.

TEACHING EXPERIENCE

Teaching Assistant of advanced Laboratory for physicists.   August 2023 - Present

Teaching Assistant of Mathematics for biologists.   March 2023 - July 2023

Teaching Assistant of Physics II for chemists.   January 2022 - March 2023

Teaching Assistant of Physics I for chemists.   March 2022 - January 2023

OUTREACH

Participation on the public outreach activity 'Semana de la Física'   2018, 2019, 2022
· Department of Physics at the University of Buenos Aires

Participation on the public outreach activity 'Plaza Ciencia'   2018
· Department of Physics at the University of Buenos Aires.

Participation on the public outreach activity 'La noche de los museos'   2018
· Department of Physics at the University of Buenos Aires.

Exhibitor at Tecnopolis.   September 2021 - March 2022
· Exhibition of science, technology, industry and art.

REFERENCES

Dr. Jorge Ariel Combi - Principal Investigator CONICET, Instituto argentino de Radioastronomía (IAR), Buenos Aires, Argentina: jorgearielcombi@gmail.com / jcombi@fcaglp.unlp.edu.ar

Dr. Federico García - CONICET Researcher, Instituto argentino de Radioastronomía (IAR), Buenos Aires, Argentina: fgarcia@iar.unlp.edu.ar / fgarcia1012002@gmail.com

Dr. Santiago del Palacio - Postdoctoral researcher, Department of Space, Earth and Environment, Chalmers University of Technology, Gothenburg, Sweden: santiagodp1990@gmail.com

Dr. Carlos Lousto - Professor and Principal Investigator, School of Mathematical Science, Rochester Institute of Technology: colsma@rit.edu

COURSES

Learn English Select Santander Argentina - Select Advanced Level C1; British Council. November 2021

Python for Beginners Course in-Depth.   March 2021

"Big Data: making the data speak"; National Institute of Public Administration.   April 2021

Validation of procedures in the measurement of particle size; Horiba webinars.   May 2020

"Cloud Computing"; Google activate.   April 2021

SKILLS

Languages	English: High-Intermediate; German: Begginer
Programming languages	Python, LaTex
Software	Tempo2, PRESTO, SolidWorks , Microsoft Office, Origin, others

INTERESTS

Running   Basketball   Guitar   Reading   Chess