

# Federico García

CONICET Researcher | Argentine Institute of Radioastronomy (IAR)

Camino Gral. Belgrano Km 40  
1984 Berazategui, Argentina  
[fgarcia@iar.unlp.edu.ar](mailto:fgarcia@iar.unlp.edu.ar)  
[tux.iar.unlp.edu.ar/~fgarcia/](http://tux.iar.unlp.edu.ar/~fgarcia/)  
[github.com/garciafederico/](https://github.com/garciafederico/)

## RESEARCH EXPERIENCE

### CONICET Researcher, IAR — *Argentina*

September 2021 - TODAY

Theoretical and observational studies of compact and extended remnants in different astrophysical scenarios.

### Guest Researcher, University of Groningen — *the Netherlands*

May-August 2023

X-ray binaries, spectral-timing models and observations (Prof. M. Méndez)

### Guest Researcher, Université Paris Cité — *France*

July 2022

X-ray binaries, formation channels, X-ray observations, Gravitational-wave progenitors (Prof. S. Chaty)

### Postdoc, University of Groningen — *the Netherlands*

September 2019 - August 2021

Spectral-timing Comptonization models and X-ray observations of X-ray binary systems (Supervisor: Prof. M. Méndez)

### Postdoc LABEX, University of Paris — *France*

September 2017 - August 2019

Gravitational-wave progenitors: from massive stellar-binary systems to black-hole binaries (Supervisor: Prof. S. Chaty)

### Postdoc CONICET, IAR — *Argentina*

April 2016 - August 2017

Investigations of neutron stars and supernova remnants in the X-ray band (Supervisor: Prof. J.A. Combi)

### Ph.D. Fellow of CONICET, IAR — *Argentina*

April 2011 - March 2016

Theoretical and observational studies of neutron stars in several astrophysical scenarios (Supervisor: Prof. J.A. Combi)

## TEACHING EXPERIENCE

### Chief of Practical Assignments, UNLP — *Argentina*

August 2015 - August 2017 | September 2021 - TODAY

Subject: Introduction to X-ray Astronomy

### Teaching Assistant (graduated), UNLP — *Argentina*

September 2011 - August 2017

Subjects: Physics 1, 2, 3, Elements of Theoretical Astrophysics.

### Teaching Assistant (student), UNLP — *Argentina*

February 2007 - July 2011

Subjects: Calculus I, Algebra, Astronomy, Computation, Introductory Math FCAGLP.

last update: 10/04/2024



## FORMATION

### PhD. in Astronomy UNLP

(Arg. | 2011-2016).

Thesis: Theoretical and observational studies of neutron stars in different astrophysical scenarios.

Supervisor: Prof. J.A. Combi.

### M. Sc. in Astronomy UNLP

(Arg. | 2004-2011).

Thesis: Magnetic-field evolution in accreting neutron stars.

Supervisor: Dr. D. Aguilera.

## LANGUAGES

**Spanish** (native)

**English** (fluid)

**French** (intermediate)

## DISTINCTIONS

**2023** - Enrique Gaviola Prize, National Academy of Sciences.

**2022** - Young Prize, National Academy of Physical Sciences.

**2016** - Distinguished Ph.D. Student UNLP, Argentina

**2012** - Distinguished M. Sc. Student UNLP, Argentina

## PUBLICATIONS

**Papers published in refereed international journals:** 67

*(Nature 1, Nat. Astronomy 1, MNRAS 32, A&A 23, ApJ 3, GRG 2, PRD 2, PRX 2, JPhG 1)*

**Papers under review:** 2 **Astronomer Telegrams:** 7 (ATel)

**Papers published in refereed national journals:** 9 (BAAA)

**Papers published in proceedings:** 6 (IAUS, AAS, APS)

**Papers as First Author** (11), **Second Author** (18), **Third Author** (16).

**Full Publication List in ADS** (2536 citations, H-index: 21, i10-index: 34)

**Google Scholar Profile** (2654 citations, H-index: 21, i10-index: 34)

## SEMINARS AND COLLOQUIA

**Colloquia and Seminars out of Argentina:** 23

**Colloquia and Seminars in Argentina:** 15

## ATTENDANCE TO SCIENTIFIC MEETINGS AND PHD SCHOOLS

**International Scientific Meetings:** 18

**National Scientific Meetings:** 15

**International Ph.D. Schools:** 8

## INTERNATIONAL RESEARCH VISITS

**France** (1), **Germany** (1), **Argentina** (1), **Spain** (3), **Italy** (1), **Japan** (1), **Netherlands** (4), **UK** (2), **Czech Rep.** (1)

## SUPERVISION OF THESES AND RESEARCH FELLOWSHIPS

**Current Ph.D. Theses:** 2 (*supervisor E. Zubieta, FCAGLP.; supervisor C. Bellavita, FCAGLP*)

**Past Ph.D. Theses:** 2 (*2023, co-promotor V. Peirano, RUG, the Netherlands; 2023, co-sup. F. Fogantini, FCAGLP, 10*)

**M.Sc. Theses:** 3 (*sup. C. Bellavita, FCAGLP, 10; cosup. E. Zubieta, FCEN-UBA, 10; cosup. F. Fogantini, FCAGLP, 10*)

**Undergrad Fellowships:** 2 (*sup. C. Bellavita, CIN; co-sup. E. Zubieta, AAA*)

**Bachelor Theses:** 2 (*cosup. J. Roomer, U. Fontys and G. Boesjes, U. Groningen, the Netherlands*)

## MEMBER OF THE JURY OF MASTER AND PHD THESES

**Ph.D. Theses:** 3 (*2019 in France, 2021 in the Netherlands, 2023 in the Netherlands*)

**M.Sc. Theses:** 4 (*1 in 2021, 3 in 2023, Argentina*)

## MEMBER OF SCIENTIFIC RESEARCH PROJECTS

**PIBAA CONICET** – *Spectral-timing studies of QPOs in X-ray binaries: Comptonization models (2022-2024)*

**PIP CONICET** – *Observational and theoretical studies of X-ray binary systems (2021-2024)*

**PICT ANPCyT** – *Observational and theoretical studies of supernova remnants and associated compact objects (2018-2021)*

**PIP CONICET** – *Phenomenological studies of X-ray sources in the Universe (2015-2017)*

## ALLOCATED TIME IN ASTRONOMICAL FACILITIES

**X-ray observatories** (*XMM-Newton, Chandra, NuSTAR, NICER, Swift*)

**Optical/IR observatories** (*Gemini South, Hubble Space Telescope*)

## MEMBER OF GROUPS AND PROFESSIONAL ASSOCIATIONS

**LIGO/Virgo Collaboration** — *APC Group France (2019-2024)*

**aaa** — *Argentine Astronomical Society (2012-)*

**PuMA Collaboration** — *Pulsar Monitoring in Argentina (2017-)*

**GARRA** — *Group of Relativistic Astrophysics and Radioastronomy IAR/UNLP Argentina (2010-)*

**GARX** — *Group of X-ray Astrophysics IAR/UNLP Argentina (2023-)*

**AAVSO** — *American Association Variable Star Observers (2008-2018)*

**IAU** — *International Astronomical Union (2020-)*

**AJA** — *Argentine Young Academy (2023-)*

## PARTICIPATION IN THE UNIVERSITY COUNCIL

**Graduated Superior Councilor** – *UNLP (2014-2017)*

**Student Directive Councilor** – *FCAGLP (2010-2011)*

**Student Academic Councilor**– *FCAGLP (2009-2010)*

**Alternate Student Academic Councilor** – *FCAGLP (2008-2009)*

## REFeree IN INTERNATIONAL JOURNALS

**MNRAS** (2020-2023), **ApJ** (2021-2024), **Nature** (2023), **Frontiers** (2023), **RAA** (2022)