

# Curriculum Vitae - Federico García

## 1 Personal information

Name: Federico García

Nationality: Argentine

Affiliation: AIM (Université Paris Diderot, CEA-Saclay, CNRS, Sorbonne Paris Cité)  
Orme des Merisiers, CEA-Saclay, 91191 Gif-sur-Yvette, France.

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## 2 Awards

- **Postdoc LABEX** (Sept 2017 - today) at Laboratoire AIM (Université Paris Diderot, CEA-Saclay, CNRS, Sorbonne Paris Cité), France.
- **Postdoc in Astronomy** (Apr 2016 - Aug 2017) at the National Scientific and Technical Research Council (CONICET) at the Argentinian Institute of Radio Astronomy (IAR).
- **PhD in Astronomy** at the Faculty of Astronomy and Geophysics (FCAGLP) of the National University of La Plata (UNLP), Argentina. PhD Thesis defended on March 30th, 2016. Mark: 10.
- **M.Sc. in Astronomy** at FCAGLP in March 2011. Average mark: 9.85/10.0.
- **Electromechanical Technician** from “Ejército de Los Andes” High-School at San Rafael, Argentina. Average mark: 9.91/10.0.

## 3 Refereed publications list (last 2 years)

- 17) **Spectral evolution of the supergiant HMXB IGR J16320-4751 along its orbit using XMM-Newton**  
Authors: **García, F.**, Fogantini, F. A., Chaty, S., Combi, J. A.  
Journal: *Astronomy & Astrophysics (A&A)*, Volumen 618, A61 (2018).
- 16) **XMM-Newton observations around NGC3268 in the Antlia Galaxy Cluster: discovery of a hidden group of galaxies at  $z = 0.41$**   
Authors: Gargiulo, I. D., **García, F.**, Combi, J. A., Caso, J. P., Bassino, L. P.  
Journal: *Monthly Notices of the Royal Astronomical Society (MNRAS)*, 479, 240 (2018).
- 15) **A surge of light at the birth of a supernova**  
Authors: M. C. Bersten, G. Folatelli, **F. García**, S. D. Van Dyk, O. G. Benvenuto, M. Orellana, V. Buso, J. L. Sánchez, M. Tanaka, K. Maeda, A. V. Filippenko, W. Zheng, T. G. Brink, S. B. Cenko, T. de Jaeger, S. Kumar, T. J. Moriya, K. Nomoto, D. A. Perley, I. Shivvers & N. Smith  
Journal: *Nature*, 554, 497 (2018).
- 14) **Indications of a Si-rich bilateral jet of ejecta in the Vela SNR observed with XMM-Newton**  
Authors: **García, F.**, Suárez, A. E., Miceli, M., Bocchino, F., Combi, J. A., Orlando, S., Sasaki, M.  
Journal: *Astronomy and Astrophysics Letters (A&AL)*, 604, 5 (2017).
- 13) **Structure of Compact Stars in R-squared Palatini Gravity**  
Authors: Teppa Pannia, F., **García, F.**, Perez Bergliaffa, S., Orellana, M., Romero, G.  
Journal: *General Relativity and Gravitation (GR&G)*, 49, 25 (2017).

My full list of publications following the next link in ADS:

[http://adsabs.harvard.edu/cgi-bin/nph-abs\\_connect?library&libname=FG&libid=4dd690caf1](http://adsabs.harvard.edu/cgi-bin/nph-abs_connect?library&libname=FG&libid=4dd690caf1)

or my Google Scholar profile in: [https://scholar.google.com.ar/citations?user=lr\\_XXXOAAAAJ&hl=es](https://scholar.google.com.ar/citations?user=lr_XXXOAAAAJ&hl=es)

## 4 Seminars and Contributions to Conferences (last 2 years)

- **Prospecting the wind accretion in the sgHMXB IGR J16320-4751**, **F. García**. Astronomical Institute of the Czech Academy of Sciences, Nov 26, 2018.
- **Prospecting the wind structure of IGR J16320-4751 with XMM-Newton and Swift (poster)**, **F. García**. IAU Symposium 346: HMXBs, Wien, Austria, Aug 27 - 31, 2018.
- **The birth of a Supernova.**, **F. García**. Colloquim at SAp CEA-Saclay, France, March 5, 2018.
- **A surge of light at the birth of a supernova**, **F. García**. AIM, U. Paris Diderot, France, Feb 13, 2018.

- **Evidence of a Si-rich jet of ejecta in Vela SNR. The connection with the SN explosion mechanism.**, F. García. Colloquim at IAR, Argentina, Aug 14, 2017.
- **Fragments in the Vela SNR and their connection with the SN explosion mechanism**, F. García. Seminar at FCAGLP, Argentina, May 31, 2017.
- **Three Lectures in X-ray timing analysis (*COSPAR Capacity Building Workshop*)**, F. García. Universidad de Río Negro, Viedma, Argentina, February 20 to March 3, 2017.
- **Observable properties of accretion disks in Kerr spacetimes (*APEC Seminar*)**, F. García. Kavli IPMU, University of Tokyo, Kashiwa, Japan, January 12, 2017.
- **Probing generalized Kerr spacetimes through accretion disks (*talk*)**, F. García. National Astronomical Observatory of Japan (NAOJ), Mitaka, Japan, January 6, 2017.

## 5 Fellowships obtained (last 2 years)

**LABEX UnivEarths Postdoc** (Sept 2017). Topic: from stellar binaries to merging compact objects. Supervisor: Dr. Sylvain Chaty (AIM, CEA-Saclay, France).

**Postdoctoral Fellowship from CONICET, Scientific and Technical Research Council, Argentina** (Apr 2016 - Mar 2018). Topic: *Theoretical and observational research of neutron stars in different astrophysical environments*. Supervisor: Dr. Jorge A. Combi.

## 6 International Scientific Visits (last 2 years)

**Astronomical Institute of the Czech Academy of Sciences (CAS), Czech Rep.**

*Period:* 26/11/2018 to 28/11/2018. - *Funding:* CAS, CEA-Saclay.

**Astronomy Department, University of Southampton, UK.**

*Period:* 08/10/2018 to 12/10/2018. - *Funding:* U. Southampton.

**Escuela Politécnica Superior, University of Jaén, Spain.**

*Period:* 29/05/2018 to 09/06/2018. - *Funding:* U. Jaén.

**Instituto Argentino de Radioastronomía (IAR), Buenos Aires, Argentina.**

*Period:* 11/04/2018 to 30/04/2018. - *Funding:* CEA-Saclay.

**Astronomy Department, Universidad de Southampton, Reino Unido.**

*Period:* 17/12/2016 to 23/12/2016. - *Funding:* U. Southampton.

**Kavli Institute of Physics and Mathematics of the Universe (IPMU), Tokio, Japan.**

*Period:* 27/12/2016 to 19/01/2017. - *Funding:* Kavli IMPU.

## 7 University Teaching (last 2 years)

- Aug 2015 - Aug 2017: **Head of Practical Assignments of X-ray Astronomy** at FCAGLP.

- Oct 2013 - Aug 2017: **Graduated Teaching Assistant of Physics III** at FCAGLP.

## 8 Thesis supervision

- Co-advisor of the M. Sc. Thesis in Astronomy of F. Fogantini. Defended on March 30, 2017. Mark: 10.

## 9 Membresy of Organizing Committees

- SOC and LOC Member of the Workshop *Links between Supernovae and Supernova Remnants in Argentina*, La Plata, Argentina, Nov 9-11, 2016.

## 10 Meetings and Schools attendance (last 2 years)

- *1st LISA Astrophysics Working Group Workshop* Paris, France, Dec 12 - 14, 2018.

- *IV ASTERICS Virtual Observatory School* Strasbourg, France, Nov 20 - 22, 2018.

- *Assemblée générale du GdR Ondes Gravitationnelles* Paris, France, Oct 18 - 19, 2018.

- *IAU Symposium 346: HMXBs* Wien, Austria, Aug 27 - 31, 2018.

- *Journée de prospectives por le futur des OG* Paris-Saclay, France, Jun 21, 2018.
- *GAIA IYAS School* Paris, France. Feb 26 - Mar 2, 2018.
- *COSPAR Capacity Building Workshop* on X-ray Astrophysics, Viedma, Argentina. Feb 20 - Mar 3, 2017.

## **11 Public Outreach activities (last 2 years)**

- Outreach talk at Star Party Valle Grande, Mendoza, Argentina, Apr 2018. Topic: "From Binary Systems to Gravitational Wave mergers".
- Outreach talk at Star Party Valle Grande, Mendoza, Argentina, May 2017. Topic: "Heavy-weight shocks: the binary system HD 93129A".

## **12 Other**

### **12.1 Awards**

- Distinguished PhD Grad, National University of La Plata, Argentina, November 2016.
- Distinguished M. Sc. Grad, National University of La Plata, Argentina, November 2012.

### **12.2 Professional affiliations**

- Member of Pulsar Monitoring in Argentina (PuMA) Collaboration, 2017-today.
- Member of Argentinian Astronomical Society, 2012-today.
- Member of Group of Relativistic Astrophysics and Radioastronomy (GARRA), 2010-today.
- Member of American Association of Variable Star Observers (AAVSO), 2008-today.

### **12.3 Language proficiency**

- Spanish: native speaker.
- English: fluent.
- French: intermediate.