Luciano Combi

Academic Formation

2011-2016 Ms.S. in Physics, Department of physics, Faculty of Exact Sciences, Universidad

Nacional de La Plata (UNLP).

Average mark: 9.60/10

Degree thesis: Equivalence between General Relativity and Teleparallel Gravity.

Mark: 10/10. Supervisor: Gustavo E. Romero.

2017-Present Ph.D. in Physics, Department of physics, Faculty of Exact Sciences, UNLP.

Thesis: Local effects of the cosmological expansion.

Supervisor: Gustavo E. Romero.

Current position

2017-Present **Doctoral Fellow**, *CONICET*.

Supervisor: Gustavo E. Romero.

Research field: gravitation, General Relativity, cosmology, black holes, local physics

and cosmology, astrophysics, foundations of physics, scientific philosophy.

Place: Instituto Argentino de Radioastronomía, Bs.As., Argentina

Ph.D. Courses

2017 Elements of Quantum Field Theory I.

Department of Physics, Faculty of Exact Sciences, UNLP

Professor: Horacio Falomir

Duration: 1 semester

Fellowships

2017 Ph.D. Research Fellow, CONICET, (National Research Council).

Supervisor: Gustavo E. Romero.

Place: Instituto Argentino de Radioastronomía, Bs.As., Argentina.

Teaching Experience

2015 **Undergraduate Teaching Assistant** of Calculus II, Department of Mathematics, Faculty of Exact Sciences, UNLP. **Period**: 1th semester

- 2015 2017 **Undergraduate Teaching Assistant**, Department of Physics, Faculty of Exact Sciences, UNLP. **Courses**: Linear Algebra, General Physics I, General Physics II
- 2015 2017 **Undergraduate Teaching Assistant** Faculty of Engineering, UNLP. **Course**: Physics I (Laboratory duties)
- 2017- Present **Graduate Teaching Assistant** Department of Physics, Faculty of Exact Sciences, UNLP. **Courses**: Gravitation, General Physics III, Methods in Mathematical Physics

Workshops and Schools

- 2016 Journeys in theoretical physics, (ICTP-Perimeter Institute). Place: Sao Paulo, Brasil. Duration: 1 week (40 hs).
- 2016 f(R) theories of gravity, (FCGALP, UNLP). **Place:** La Plata, Argentina. **Duration:** 1 week (40 hs).
- 2018 LAPIS: Cosmology in the era of large surveys, (FCGALP, UNLP). Place: La Plata, Argentina. Duration: 1 week (40 hs).
- 2018 International Pulsar Timing Array, student week, (NRAO). Place: New Mexico, USA. Duration: 1 week (40 hs).
- 2018 First Biennial Midwest Summer School in Philosophy of Physics, (University of Chicago). Place: Chicago, USA. Duration: 1 week (40 hs).
- 2018 The Sound of Space-Time: The dawn of Gravitational Wave Science, (ICTP-SAIFR). Place: Sao Paulo, Brasil. Duration: 3 weeks (120 hs).

Research stays abroad

2018 West Virginia University with NANOGrav Collaboration. Place: Morgantown, West Virginia, USA. Duration 4 week.

Scientific meetings

Invited presentation

- 2018 First Pulsar Observations in Southamerica
 Binational meeting SOCHIAS-AAA, La Serena, Chile. Octubre 16
 Contribution presentation
- 2015 Inconsistency within the Everett interpretation of Quantum Mechanics
 First Latinamerican congress of Scientific Philosophy (In honor to Mario Bunge),
 Buenos Aires, Argentina. October 2015
- 2017 PuMA proyect: Pulsar Monitoring in Argentina (in Spanish)
 Encuentro de Estudiantes de Astronomía, Buenos Aires, Argentina. September 2017
 Posters
- 2015 Force between cylindric magnets: Theory and experiment (in Spanish)
 Luciano Combi, Lucas Pili, Pablo Pisani, Fernando Monticelli
 100^a Anual Meeting of the Asociación Argentina de Física (AFA), September 2015
- 2017 Intensive monitoring of pulsars in the south hemisphere (in Spanish)

Luciano Combi, Jorge Combi, Federico García, Guillermo Gancio, Carlos Lousto Anual Meeting of the Asocación Argentina de Astronomía (AAA), September 2017

2018 Orbits in inhomogenous expanding space-times

Luciano Combi, Eduardo Gutiérrez

LAPIS: Cosmology in the era of large surveys, April, 2018

2018 The IAR observatory and the PuMA project
Luciano Combi, Guillermo Gancio, Carlos Lousto
IPTA international meeting, Albuquerque, USA

Outreach

2018 Friday talks in the Planetarium: Gravitational waves and pulsars Planetarium, La Plata, Argentina

2018 **Outreach** department member of Argentine Institute of Radioastronomy
In charge of social media management and guide for primary school and high-school visits to the Institute

Languages

Native Spanish

English

French

Memberships

PuMA (*Pulsar Monitoring in Argentina* collaboration. **Status:** Full member. **Place:** Argentine Institute of Radioastronomy (IAR), La Plata, Argentina

Awards

2017 **Joaquín V. Gonzales award** for distinguished graduate of the National University of La Plata. Given by the City Government of La Plata, Capital of Buenos Aires.

Other activities

Reviewer in scientific journals and institutions:

Astrophysics and Space Science (Springer) Gravitation and Cosmology (Springer) Estonia (ETIS)

Publications

Refereed papers in international journals

1 Inconsistency within the Everett interpretation of Quantum Mechanics.

Luciano Combi, Gustavo E. Romero.

Methateoria (ISSN 1853-2322) 7, 47-53, 2017

2 Is Teleparallel Gravity really equivalent to General Relativity?.

Luciano Combi, Gustavo E. Romero.

Annalen der Physik, 1700175, 2017

3 Gravitational Energy and radiation of a charged black hole.

Luciano Combi, Gustavo E. Romero.

Classical and Quantum Gravity, 34, 195008, 2017

4 A note on geodesics in inhomogeneous expanding spacetimes.

D. Perez, G.E. Romero, Luciano Combi, E.M. Gutiérrez.

Classical and Quantum Gravity, 36, 055002, 2019

Observational experience

Telegrams

1 Follow up of the radio flare from the magnetar XTE J1810-197 at 1.4 GHz.

Del Palacio, S.; Garcia, F.; Combi, L.; Lopez Armengol, F.; Gancio, G.; Muller, A. L.; Kornecki, P.

The Astronomer's Telegram, 12323, 2018