

Gabriela Soledad Vila

PhD in Physics

Instituto Argentino de Radioastronomía
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Personal data

Name Gabriela Soledad Vila
Date of birth December 1st, 1980
Nationality Argentinian and Italian

Current position

August 2013 - present **Researcher of the Argentinian National Research Council (CONICET).**
Category Assistant Researcher
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET)

Previous positions

April 2012 - July 2013 **Postdoctoral Fellow of CONICET.**
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET)
April 2007 - March 2012 **Doctoral Fellow of CONICET.**
Working place: Instituto Argentino de Radioastronomía (IAR - CONICET)

Academic formation

2012 **PhD in Physics, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires.**
Thesis: Radiative models for jets in X-ray binaries.
Supervisor: Dr. Gustavo E. Romero
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET)
2007 **Master (Licenciada) in Physics, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires.**
Thesis: Hadronic interactions around galactic black holes (Interacciones hadrónicas en el entorno de agujeros negros galácticos).
Supervisor: Dr. Gustavo E. Romero
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET)

List of publications

Refereed papers in international journals

1. **High-energy signatures of binary systems of supermassive black holes.**
G. E. Romero, G. S. Vila & D. Pérez
Astronomy & Astrophysics, 588, A125 (2016)
2. **Lepto-hadronic model for the broadband emission of Cygnus X-1.**
C. Pepe, G. S. Vila & G. E. Romero
Astronomy & Astrophysics, 584, A95 (2015)
3. **Parametrization of gamma-ray production cross-sections for pp interactions in a broad proton energy range from the kinematic threshold to PeV energies.**
E. Kafexhiu, F. Aharonian, A. M. Taylor & G. S. Vila
Physical Review D, 90, id.123014 (2014)
4. **An inhomogeneous lepto-hadronic model for the radiation of relativistic jets. Application to XTE J1118+480.**
G. S. Vila, G. E. Romero & N. A. Casco
Astronomy & Astrophysics, 538, A97 (2012)

5. **Nuclear reactions in hot astrophysical plasmas with $T > 10^{10}$ K.**
E. Kafexhiu, F. Aharonian & G. S. Vila
Int. J. Mod. Phys. D, 21, 1250009-1 (2012)
6. **Non-thermal processes around accreting galactic black holes.**
G. E. Romero, F. L. Vieyro & G. S. Vila
Astronomy & Astrophysics, 519, A109 (2010)
7. **Leptonic/hadronic models for electromagnetic emission in microquasars: the case of GX 339-4.**
G. S. Vila & G. E. Romero
Mon. Not. R. Astron. Soc., 403, 1457-1468 (2010)
8. **On the nature of the AGILE galactic transient sources.**
G. E. Romero & G. S. Vila
Astronomy & Astrophysics (Letters), 494, L33-L36 (2009)
9. **The proton low-mass microquasar: high-energy emission.**
G. E. Romero & G. S. Vila
Astronomy & Astrophysics, 485, 623-631 (2008)

Books

1. **Proceedings of the Second Argentinian-Brazilian Meeting on Gravitation, Relativistic Astrophysics and Cosmology.**
Gabriela S. Vila, Florencia L. Vieyro & Júlio C. Fabris (eds.)
Asociación Argentina de Astronomía, Workshop Series, vol. 7, November 2015.
2. **Introduction to Black Hole Astrophysics.**
Gustavo E. Romero & Gabriela S. Vila
Lecture Notes in Physics 876, Springer, September 2013.

Chapters of books

1. **Radiation Processes in High-Energy Astrophysics.**
Gabriela S. Vila & Felix Aharonian
In: G. E. Romero & P. Benaglia (eds.), Compact Objects and their Emission, Editorial Paideia, La Plata, Argentina, 2009.

International conference proceedings

1. **Spectral energy distribution, polarization, and synthetic radio maps of Cygnus X-1: a lepto-hadronic jet model.**
C. Pepe, G. S. Vila & G. E. Romero
Proceedings of the Fifth Meeting on High-Energy Phenomena in Relativistic Outflows (HEPRO V), Asociación Argentina de Astronomía, Workshop Series, submitted (2015)
2. **Proton loading of jets and other consequences of the injection of neutrons in accretion flows.**
G. S. Vila, F. L. Vieyro & Gustavo E. Romero
Gravitation, Relativistic Astrophysics, and Cosmology, Proceedings of the Second Argentinian-Brazilian Meeting, Asociación Argentina de Astronomía, Workshop Series, vol. 7, 177-182 (2015)
3. **Supermassive black hole binaries at high energies.**
G. E. Romero, D. Pérez & G. S. Vila
Int. J. Mod. Phys. Conf. Series, 28, 1460183 (2014)
4. **Neutron production in black hole coroneae and proton loading of jets.**
G. S. Vila, F. L. Vieyro & G. E. Romero
Int. J. Mod. Phys. Conf. Series, 28, 1460191 (2014)
5. **High-energy signatures of binary supermassive black holes.**
G. S. Vila, D. Pérez & G. E. Romero
The Innermost Regions of Relativistic Jets and Their Magnetic Fields, EPJ Web of Conferences, 61, 08005 (2013)
6. **Astrophysical jets.**
G. S. Vila
Gravitation, Relativistic Astrophysics, and Cosmology, Proceedings of the First Argentinian-Brazilian Meeting, Editorial Livraria da Física, 191-209 (2013)

7. **Non-thermal radiation from Cygnus X-1 corona.**
F. L. Vieyro, G. E. Romero & G. S. Vila
Proceedings of the Second Meeting on High-Energy Phenomena in Relativistic Outflows (HEPRO II), Int. J. Mod. Phys. D, 19, 783-789 (2010)
 8. **High-energy particle interactions in the inner jet of the radio galaxy M87.**
C. Guennou, G. E. Romero & G. S. Vila
Proceedings of the Second Meeting on High-Energy Phenomena in Relativistic Outflows (HEPRO II), Int. J. Mod. Phys. D, 19, 957-963 (2010)
 9. **Radiative processes in jets.**
G. S. Vila
Proceedings of the Second Meeting on High-Energy Phenomena in Relativistic Outflows (HEPRO II), Int. J. Mod. Phys. D, 19, 659-669 (2010)
 10. **A model for jets of low-mass microquasars.**
G. S. Vila & G. E. Romero
Proceedings of the 25th Texas Symposium on Relativistic Astrophysics, POS(Texas 2010) 016 (2010)
 11. **Excitation and destruction of nuclei in hot astrophysical plasmas around black holes.**
E. Kafexhiu, G. S. Vila & F. Aharonian
Proceedings of the 11th Symposium on Nuclei in the Cosmos, POS(NIC XI) 167 (2010)
 12. **A leptonic/hadronic jet model for the low-mass microquasar XTE J1118+480.**
G. S. Vila & G. E. Romero
Proceedings of the IAU Symposium 275: Jets at all Scales, Proceedings of the International Astronomical Union, 275, 315-316 (2010)
 13. **High-energy cosmic-ray interactions.**
R. Engel, M. Orellana, M. Reynoso & G. S. Vila
Cosmic Rays and Astrophysics: Proceedings of the 3rd International School on Cosmic Rays and Astrophysics, AIP Conference Proceedings, 1123, 65-78 (2009)
 14. **High-energy emission in low-mass microquasars.**
G. S. Vila & G. E. Romero
First La Plata International School Compact Objects and their Emission, Scientific Contributions, Editorial Paideia, 67-74 (2009)
 15. **Models for gamma-ray production in low-mass microquasars.**
G. S. Vila & G. E. Romero
Proceedings of the First Meeting on High-Energy Phenomena in Relativistic Outflows (HEPRO I), Int. J. Mod. Phys. D, 17, 1903-1908 (2008)
 16. **The proton microquasar.**
G. S. Vila & G. E. Romero
High Energy Gamma-Ray Astronomy: Proceedings of the 4th International Meeting on High Energy Gamma-Ray Astronomy, AIP Conference Proceedings, 1085, 289-292 (2008)
 17. **High-energy emission from accreting black holes with high-mass donor stars.**
G. S. Vila & G. E. Romero
Massive stars: Fundamental Parameters and Circumstellar Interactions, Revista Mexicana de Astronomía y Astrofísica (Serie de Conferencias), 33, 12-12 (2008)
- National conference proceedings
1. **Spectral energy distribution, radio maps and polarization of Cygnus X-1: a leptohadronic model.**
G. S. Vila, C. Pepe & G. E. Romero
Boletín de la Asociación Argentina de Astronomía, 58, accepted (2016)
 2. **Lepto-hadronic model for the broadband emission of Cygnus X-1: preliminary results.**
C. Pepe, G. S. Vila & G. E. Romero
Boletín de la Asociación Argentina de Astronomía, 57, 228-230 (2015)
 3. **Radiative models for jets in X-ray binaries.**
G. S. Vila
Boletín de la Asociación Argentina de Astronomía, 55, 539-548 (2012)
 4. **Non-thermal radiation from galactic black hole coronae.**
F. L. Vieyro, G. E. Romero & G. S. Vila
Boletín de la Asociación Argentina de Astronomía, 52, 263-266 (2009)

5. **An analysis of the broadband electromagnetic emission of the microquasar GX 339-4.**
G. S. Vila & G. E. Romero
Boletín de la Asociación Argentina de Astronomía, 52, 267-270 (2009)
6. **Lepto-hadronic models of high-energy radiation from microquasars: application to GX 339-4.**
G. S. Vila & G. E. Romero
Boletín de la Asociación Argentina de Astronomía, 51, 309-312 (2008)
7. **A model for gamma-ray sources in the galactic halo.**
G. S. Vila & G. E. Romero
Boletín de la Asociación Argentina de Astronomía, 50, 323-326 (2007)
8. **Hadronic interactions around black holes.**
G. E. Romero & G. S. Vila
Boletín de la Asociación Argentina de Astronomía, 49, 342-345 (2006)

Contributions presented in scientific meetings

Participation and contributions presented in international scientific meetings

- April 2017 **Grav17**, La Falda, Argentina.
Invited talk: Astrophysical Black Holes: mass, spin, accretion and jets, G. S. Vila.
- July 2016 **6th International Symposium on High-Energy Gamma-Ray Astronomy (Gamma2016)**, Heidelberg, Germany.
Attendee.
- April 2016 **Third Argentinian-Brazilian Meeting on Gravitation, Relativistic Astrophysics and Cosmology (GRACo III)**, Rio de Janeiro, Brasil.
Invited talk: Peeping into the jets of X-ray binaries: spectral energy distributions, radio maps and polarization - The case of Cygnus X-1, G. S. Vila.
- October 2015 **High-Energy Phenomena in Relativistic Outflows V (HEPRO V)**, La Plata, Argentina.
Contributed talk: Spectral energy distribution, polarization, and synthetic radio maps of Cygnus X-1: a lepto-hadronic jet model, C. Pepe, G. S. Vila & G. E. Romero (presented by C. Pepe).
- April 2014 **Second Argentinian-Brazilian Meeting on Gravitation, Relativistic Astrophysics and Cosmology (GRACo II)**, Buenos Aires, Argentina.
Contributed talk: Proton loading of jets, G. S. Vila, F. L. Vieyro & G. E. Romero.
- July 2013 **High-energy Phenomena in Relativistic Outflows IV (HEPRO IV)**, Heidelberg, Germany.
Contributed talk: Proton loading of relativistic jets, G. S. Vila, G. E. Romero, & F. L. Vieyro.
- June 2013 **The innermost regions of relativistic jets and their magnetic fields**, Granada, Spain.
Contributed talk: High-energy signatures of binary supermassive black holes, G. S. Vila, D. Pérez & G. E. Romero.
- May 2013 **Lorentz Center Workshop: Locating Astrophysical Transients**, Leiden, Netherlands.
Invited talk: Radiative jet models for low-mass X-ray binaries, G. S. Vila.
- May 2013 **International Cargèse School on Cosmic Accelerators**, Cargèse, France.
Contributed talk: Proton loading of relativistic jets, G. S. Vila, F. L. Vieyro & G. E. Romero.
- April 2013 **Grav13**, Villa General Belgrano, Argentina.
Invited talk: Astrophysical Black Holes, G. S. Vila.
- November 2012 **Cherenkov Telescope Array (CTA) LINK Meeting**, Buenos Aires, Argentina.
Invited talk: Gamma-ray, neutrino, and positron emission from galactic jet sources, G. S. Vila.
- October 2011 **First Argentinian-Brazilian Meeting on Gravitation, Astrophysics and Cosmology**, Foz de Iguaçú, Brazil.
Invited talk: Astrophysical jets, G. S. Vila.
- September 2010 **IAU Symposium 275: Jets at all Scales**, Buenos Aires, Argentina.
Poster: A leptonic/hadronic jet model for the low-mass microquasar XTE J1118+480, G. S. Vila & G. E. Romero.

- October 2009 **High Energy Phenomena in Relativistic Outflows II (HEPRO II)**, Buenos Aires, Argentina.
Invited talk: Radiative processes in jets, G. S. Vila.
- October 2009 **High Energy Phenomena in Relativistic Outflows II (HEPRO II)**, Buenos Aires, Argentina.
Poster: Non-thermal radiation from Cygnus X-1 corona, F. L. Vieyro, G. E. Romero & G. S. Vila.
- October 2009 **High Energy Phenomena in Relativistic Outflows II (HEPRO II)**, Buenos Aires, Argentina.
Poster: High-energy particle interactions in the inner jet of the radio galaxy M87, C. Guennou, G. E. Romero & G. S. Vila.
- August 2008 **Third School on Cosmic Rays and Astrophysics**, Universidad Nacional de San Agustín, Arequipa, Peru.
Poster: The proton microquasar, G. S. Vila & G. E. Romero.
- March 2008 **First La Plata International School on Astronomy and Geophysics**, Facultad de Ciencias Astronómicas y Geofísicas, UNLP, La Plata, Argentina.
Contributed talk: High-energy emission in low-mass microquasars, G. S. Vila & G. E. Romero.
- December 2006 **International Workshop on Massive Stars: Fundamental Parameters and Circumstellar Interactions**, Cariló, Argentina.
Poster: High-energy emission from accreting black holes with high-mass donor stars, G. S. Vila & G. E. Romero.
- Participation and contributions presented in national scientific meetings**
- March 2016 **Radioastronomy in Argentina: 50th anniversary of the IAR**, La Plata, Argentina.
Invited talk: Theoretical and numerical astrophysics at IAR: present and future, G. S. Vila.
- September 2015 **58th Annual Meeting of the Asociación Argentina de Astronomía**, La Plata, Argentina.
Poster: Spectral energy distribution, polarization, and synthetic radio maps of Cygnus X-1: a leptohadronic jet model, G. S. Vila, C. Pepe & G. E. Romero.
- September 2012 **55th Annual Meeting of the Asociación Argentina de Astronomía**, Mar del Plata, Argentina.
Invited talk: Carlos M. Varsavsky Prize: Radiative models for jets in X-ray binaries, G. S. Vila .
- September 2009 **52nd Annual Meeting of the Asociación Argentina de Astronomía**, La Plata, Argentina.
Poster: An analysis of the broadband electromagnetic emission of the microquasar GX 339-4, G. S. Vila & G. E. Romero.
- September 2007 **50th Annual Meeting of the Asociación Argentina de Astronomía**, Malargüe, Argentina.
Contributed talk: A model for gamma-ray sources in the galactic halo, G. S. Vila & G. E. Romero.
- September 2006 **49th Annual Meeting of the Asociación Argentina de Astronomía**, Capilla del Monte, Argentina.
Poster: Hadronic interactions around black holes, G. E. Romero & G. S. Vila.
- Other contributions presented in international scientific meetings**
- July 2013 **High-energy Phenomena in Relativistic Outflows IV (HEPRO IV)**, Heidelberg, Germany.
Contributed talk: Supermassive binary black holes at high energies, G. E. Romero, G. S. Vila & D. Pérez (presented by G. E. Romero).
- December 2010 **25th Texas Symposium on Relativistic Astrophysics**, Heidelberg, Germany.
Contributed talk: A model for jets of low-mass microquasars, G. S. Vila & G. E. Romero (presented by G. E. Romero).
- July 2010 **11th Symposium on Nuclei in the Cosmos (NIC XI)**, Heidelberg, Germany.
Poster: Excitation and destruction of nuclei in hot astrophysical plasmas around black holes, E. Kafexhiu, G. S. Vila & F. Aharonian (presented by E. Kafexhiu).

July 2008 **Fourth International Meeting on High Energy Gamma-Ray Astronomy**, Heidelberg, Germany.

Poster: The proton microquasar, G. S. Vila & G. E. Romero (presented by G. E. Romero).

September 2007 **High-Energy Phenomena in Relativistic Outflows I (HEPRO I)**, Dublin, Ireland.

Poster: Models for gamma-ray production in low-mass microquasars, G. S. Vila & G. E. Romero (presented by G. E. Romero).

Other contributions presented in national scientific meetings

September 2014 **57th Annual Meeting of the Asociación Argentina de Astronomía**, Córdoba, Argentina.
Contributed talk: Lepto-hadronic model for the electromagnetic emission of Cygnus X-1, C. Pepe, G. S. Vila & G. E. Romero (presented by C. Pepe).

September 2009 **52nd Annual Meeting of the Asociación Argentina de Astronomía**, La Plata, Argentina.
Contributed talk: Non-thermal radiation from galactic black hole coronae, F. L. Vieyro, G. E. Romero & G. S. Vila (presented by F. L. Vieyro).

September 2008 **51st Annual Meeting of the Asociación Argentina de Astronomía**, San Juan, Argentina.
Contributed talk: Radiative lepto-hadronic models for the X-ray binary GX 339-4 in the low-hard state, G. S. Vila & G. E. Romero (presented by G. E. Romero).

Attendance to international schools

1. **IMPRS Summer School on Astrostatistics and Data Mining.**
Heidelberg, Germany, September 12th - 16th 2016
2. **International Cargèse School on Cosmic Accelerators.**
Cargèse, France, April 29th - May 8th 2013
3. **40th Saas-Fee Course of the Swiss Society for Astrophysics and Astronomy (SSAA): Astrophysics at very High-Energies.**
Les Diablerets, Switzerland, March 14th - 20th 2010
4. **Third School on Cosmic Rays and Astrophysics.**
Universidad Nacional de San Agustín, Arequipa, Peru, August 25th - September 5th 2008.
5. **First La Plata International School on Astronomy and Geophysics: Compact Objects and Their Emission.**
Facultad de Ciencias Astronómicas y Geofísicas, UNLP, La Plata, Argentina, March 11th - 14th 2008.

Visits to foreign institutions

1. **Max-Planck-Institut für Kernphysik, Heidelberg, Germany**, July 1st - December 31st 2016, to work in collaboration with the group of Dr. Felix Aharonian.
2. **Departament d'Astronomia i Astrofísica, Universitat de Valencia, Valencia, Spain**, March 3rd - April 3rd 2014, to work in collaboration with Dr. Manel Perucho in numerical simulations of the interaction of runaway stars with molecular clouds.
3. **Departament d'Astronomia i Meteorologia, Facultat de Física, Universitat de Barcelona, Barcelona, Spain**, June 17th - June 19th 2013, to work in collaboration with the group of Dr. Josep Maria Paredes. Presentation of the colloquium "*Radiative models for jets in X-ray binaries*".
4. **Max-Planck-Institut für Kernphysik, Heidelberg, Germany**, April 25th - August 2nd 2013, to work in collaboration with the group of Dr. Felix Aharonian.
5. **Max-Planck-Institut für Kernphysik, Heidelberg, Germany**, February 1st - April 29th 2010, to work in collaboration with the group of Dr. Felix Aharonian in nuclear processes in hot astrophysical plasmas around accreting black holes.
6. **Universidade Estadual de Campinas, San Pablo, Brazil**, April 11th - 23rd 2008, to work in collaboration with the group of Dr. Orlando Peres in theoretical models for neutrino emission in gamma-ray bursts.

Awards

1. “Carlos M. Varsavsky” Prize to the best Ph.D. Thesis on Astronomy and Astrophysics in Argentina 2010-2012, awarded by the Asociación Argentina de Astronomía, September 2012.

Supervision of thesis

1. **Mr. Gastón J. Escobar**,
Supervisor of his Master Thesis in Astronomy, Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, defended in March 2017
Tittle: High-energy radiation in ultraluminous X-ray sources
Co-supervisor: Dr. Gustavo E. Romero.
2. **Ms. Florencia L. Vieyro**,
Co-supervisor of her Master Thesis in Astronomy, Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, defended in March 2009
Tittle: Non-thermal radiation around accreting black holes
Supervisor: Dr. Gustavo E. Romero.

Teaching positions

- June 2014 - present **Teaching auxiliary in the Chair of Relativistic Astrophysics**, Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata.
- September 2009 - May 2014 **Graduate teaching assistant in the Chair of Relativistic Astrophysics**, Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata.
- July 2012 - April 2013 **Teaching auxiliary in Physics I**, Facultad de Ingeniería, Universidad Nacional de La Plata.
- March 2009 - February 2014 **Graduate teaching assistant in Physics I**, Facultad de Ingeniería, Universidad Nacional de La Plata.
- April 2006 - September 2008 **Graduate teaching assistant in the Chair of Physics**, Ciclo Básico Común, Universidad de Buenos Aires.
- April 2004 - March 2007 **Undergraduate teaching assistant in the Area of Basic Physics**, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires.

Activities as evaluator and referee

Reviewer of theses

- 2016 Reviewer of the PhD thesis in Physics of Lic. Federico Carrasco, Universidad Nacional de Córdoba, Argentina, defended on March 30th, 2016.
- 2016 Reviewer of the MSc thesis in Astronomy of Ms. Ana Laura Müller, Universidad Nacional de La Plata, Argentina, defended on March 23rd, 2016.

Referee for international journals

- 2014 Referee for Monthly Notices of the Royal Astronomical Society.

Referee for national journals

- 2015, 2014 Referee for Boletín de la Asociación Argentina de Astronomía.

Fellowships

- April 2012 - July 2013 **Post-Doctoral Fellowship granted by the National Research Council (CONICET)**,
Topic: Dynamics and radiation of magnetized jets
Supervisor: Dr. Gustavo E. Romero
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET) .
- April 2007 - March 2012 **Doctoral Fellowship granted by the National Research Council (CONICET)**,
Topic: Theoretical studies on radiative processes in galactic compact gamma-ray sources
Supervisor: Dr. Gustavo E. Romero
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET) .

February - **Summer Fellowship granted by the Asociación Argentina de Astronomía,**
March 2007 Topic: Synchrotron radiation of relativistic protons in microquasar jets
Supervisor: Dr. Gustavo E. Romero
Working place: Instituto Argentino de Radioastronomía (IAR-CONICET) .

Post-graduate courses attended

- 2010 **Introduction to Magnetohydrodynamics**, Facultad de Ciencias Astronómicas y Geofísicas, UNLP. 75 h.
Professor: Dr. Ana María Platzeck.
- 2010 **Elementary Particle Physics**, Facultad de Ciencias Exactas y Naturales, UBA. 120 h.
Professor: Dr. Daniel de Florian.
- 2009 **Introduction to Programming, Numerical Analysis and Simulations for Scientists**, Instituto de Física de Líquidos y Sistemas Biológicos (IFLYSIB - CONICET - UNLP). 70 h.
Professor: Dr. Manuel Carlevaro & Dr. Luis Pugnaroni.
- 2009 **Introduction to Black Holes Physics**, Facultad de Ciencias Astronómicas y Geofísicas, UNLP. 96 h.
Professor: Dr. Gustavo E. Romero.
- 2008 **Introduction to radio - VLBI**, Facultad de Ciencias Astronómicas y Geofísicas, UNLP. 9 h.
Professor: Dr. Josep Martí Ribas.
- 2007 **Astrophysics**, Facultad de Ciencias Exactas y Naturales, UBA. 120 h.
Professor: Dr. Daniel Gómez.
- 2007 **Introduction to Relativistic Astrophysics**, Facultad de Ciencias Astronómicas y Geofísicas, UNLP. 96 h.
Professor: Dr. Gustavo E. Romero.

Miscellaneous

Organization of scientific meetings

1. **Third Argentinian-Brazilian Meeting on Gravitation, Relativistic Astrophysics and Cosmology (GRACo III)**,
Chair of the Local Organizing Committee Argentina,
Rio de Janeiro, Brazil, 26-29 April 2016,
<http://mesonpi.cat.cbpf.br/gracoiii/>.
2. **High-Energy Phenomena in Relativistic Outflows V (HEPRO V)**,
Co-chair of the Local Organizing Committee,
La Plata, Argentina, 5-8 October 2015,
<http://hepro5.iar.unlp.edu.ar/>.
3. **Second Argentinian-Brazilian Meeting on Gravitation, Relativistic Astrophysics and Cosmology (GRACo II)**,
Member of the Local Organizing Committee,
Buenos Aires, Argentina, 22-25 April 2014,
<http://graco2.iar.unlp.edu.ar/>.
4. **First La Plata International School on Astronomy and Geophysics**,
Member of the Local Organizing Committee,
Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, March 2008.

Membership of scientific organizations

- 2006 - present Asociación Argentina de Astronomía (AAA)
- 2007 - present Group of Relativistic Astrophysics and Radioastronomy (GARRA), Instituto Argentino de Radioastronomía / Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata (<http://garra.iar.unlp.edu.ar/>)

Informatics

Programming languages	C/C++, Matlab, Mathematica, Fortran.
Programming tools	OpenMP, Visual Studio, Eclipse, Doxygen, SVN.
Others	L ^A T _E X, Office.