

Curriculum vitae: Francisco Prada

Instituto de Astrofísica de Andalucía (CSIC)

Glorieta de la Astronomía s/n

18008 Granada, Spain

Phone: +34 958 230628

Fax: +34 958 814530

Email: fprada@iaa.es

Web: <http://www.iaa.es/~fprada/group/>

DATE and PLACE of BIRTH: 12 August, 1968, Seville, Spain

NATIONALITY: Spanish

ACADEMIC RECORD:

1991 BSc in Physics from the University of La Laguna, Tenerife, Spain

1995 Ph.D. in Astronomy from the *Queen's University of Belfast, UK*

Thesis: The physics and kinematics of starburst galaxies, supervisor Conald McKeith

EMPLOYMENT:

Position	Institution	Dates
Postdoctoral Researcher	Max-Planck-Institut fuer Extraterrestrische Physik, Garching, Germany	Mar 1995 - Sep 1995
Postdoc	Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain	Oct 1995 – Sep 1997
Postdoc	Instituto de Astronomía, Observatorio Astronómico Nacional, UNAM, Mexico	Oct 1997 – Feb 1999
Resident Astronomer	Spanish-German Astronomical Center, Almería, Spain	Feb 1999 – Jun 2002
Support Astronomer	Instituto de Astrofísica de Canarias & Isaac Newton Group of telescopes, La Palma, Spain	Jul 2002 – Sep 2003
Ramón y Cajal Fellow	Instituto de Astrofísica de Andalucía – CSIC, Granada, Spain	Sep 2003 – Jul 2006
Científico Titular	Instituto de Astrofísica de Andalucía – CSIC, Granada, Spain	Jul 2006 – Jun 2009
Director	Instituto de Astrofísica de Andalucía – CSIC, Granada, Spain	Jun 2007 – Jan 2009
Investigador Científico	Instituto de Astrofísica de Andalucía – CSIC, Granada, Spain	Jun 2009 - Present

FELLOWSHIPS and AWARDS:

1992-1995 SERC Predoctoral Fellowship, Queen's University Belfast, UK

2003-2006 Ramón y Cajal Fellowship, Instituto de Astrofísica de Andalucía (CSIC)

VISITING POSITIONS:

Visiting Research Physicist, Santa Cruz Institute for Particle Physics, University of California Santa Cruz, USA, Jul-Aug 2008 and Jul-Aug 2009

Visiting Professor, Institute for Computational Cosmology, Durham University, UK, Jul-Aug 2010

LANGUAGES:

Spanish (mother tongue), English (fluent), French

RESEARCH INTERESTS:

I'm leading a group in Granada working on various theoretical and observational aspects of Cosmology and Astroparticle physics. I'm also involved in the development of instrumentation for spectroscopic surveys and databases for cosmological simulations. My main research interests concern the nature of the dark components of the Universe and the understanding of structure formation, in particular:

- Dark matter annihilation and decay detectability
- The formation and evolution of dark matter halos: theory and simulations
- Large scale structure: dark matter, dark energy and cosmological parameters
- Galaxy formation and evolution
- Survey spectroscopy: instrumentation development
- Databases for cosmological simulations

RESEARCH PROJECTS:

- **MultiDark** - Multimessenger Approach for Dark Matter Detection, <http://projects.ift.uam.es/multidark/>
- **SDSS-III/BOSS** - Baryon Oscillation Spectroscopic Survey, <http://www.sdss3.org/>
- **BigBOSS** - The Ground-Based Stage IV BAO Experiment, <http://bigboss.lbl.gov/>
- **SIDE** - Super Ifu Deployable Experiment, <http://side.iaa.es>
- **ALHAMBRA Survey**, <http://alhambra.iaa.es:8080/alhambra/>
- **MAGIC** - Major Atmospheric Gamma Imaging Cherenkov telescope, <http://magic.mppmu.mpg.de/>
- **GAW** - Gamma Air Watch <http://gaw.ifc.inaf.it/>

TRAINING EXPERIENCE:

1996 Peter Gallagher, "The environment of spiral galaxies: faint object detection and classification", MSc thesis, Queen's University of Belfast, UK

2003 Carlos Domínguez Tagle-Paredes, "Star formation rate in $0.5 < z < 1$ galaxies: a scientific case for the multi-slit near-infrared spectrograph LIRIS and the technical requirements involved", Ph.D. thesis, Universidad de La Laguna, Spain

2006 Hugo Tavío, “The dark outside: the density profile of dark matter haloes beyond the virial radius”, MSc thesis, Universidad de Granada, Spain

2007 Santiago Patiri, “Large-scale structures in the Universe: observations, theory and simulations”, Ph.D. thesis, Universidad de la Laguna, Spain

2009 Miguel A. Sanchez-Conde, “The nature of dark matter: gamma-ray detectability and the evolution of CDM halos”, Ph.D. thesis, Universidad de Granada, Spain

2010 Antonio J. Cuesta, “The virialized properties of dark matter halos: signals from the large-scale structure”, Ph.D. thesis, Universidad de Granada, Spain

Ph.D. thesis projects in progress, expected submission date in brackets:

(2011) Nayra Rodriguez-Eugenio, “Star formation rates of a $z \sim 1$ DEEP2 galaxy sample from LIRIS multi-slit $H\alpha$ spectroscopy”, Ph.D. thesis, Universidad de la Laguna, Spain

(2011) Antonio Montero-Dorta, “Galaxy evolution with massive spectroscopic surveys: future prospects”, Ph.D. thesis, Universidad de Granada, Spain

(2011) Alberto Dominguez, “Extragalactic background light and its implications for galaxy evolution and gamma-ray astronomy”, Ph.D. thesis, Universidad de Sevilla, Spain

(2012) Fabio Zandanel, “Gamma ray in galaxy clusters: dark matter and non-thermal emission searches”, Ph.D. thesis, Universidad de Granada, Spain

POSTDOCTORAL AND ENGINEERING ASSISTANTS:

Postdoctoral advisor: Mattia Fornasa, Apr 2010 – Present

Engineers: Marco Azzaro (Project Manager, System Engineer), Santiago Becerril (Mechanical Engineer), Justo Sanchez (Electronic Engineer) and Isaac Morales (Software Engineer)

MANAGEMENT EXPERIENCE:

LIRIS, long-slit Intermediate Resolution Infrared Spectrograph for the 4.2m WHT at La Palma, <http://www.ing.iac.es/astronomy/instruments/liris/>
Principal Investigator 1996-1997; Co-P.I. 1997-2004

OSIRIS, Optical System for Imaging and low-Resolution Integrated Spectroscopy, <http://www.gtc.iac.es/en/pages/instrumentation/osiris.php>
Feasibility Study
Member of the Instrument Definition Team, 1998

Spanish Participation in EUSO (Extreme Universe Space Observatory)
Feasibility study for the construction of an infrared camera for EUSO
Spanish representative in EUSO 2004- 2005

SIDE, a wide-field fiber-fed spectrograph for the GRAN TELESCOPIO CANARIAS 10.4m
Feasibility Study
Principal Investigator 2005-2009

Director, Instituto de Astrofísica de Andalucía – CSIC (www.iaa.es)
Management and legal representative, Director 22/06/07 to 28/01/09

XMS, a wide-field multi-slit spectrograph for the Calar Alto 3.5m telescope
Feasibility Study
Co-Principal Investigator 2008-2009, Responsible of the IAA-CSIC contribution

MAGIC - Major Atmospheric Gamma Imaging Cherenkov telescope
Member of the Collaboration Board since 2006, Responsible of the IAA-CSIC MAGIC group

SDSS-III – Sloan Digital Sky Survey
Member of the Collaboration, Advisory Committee member since 2010, MultiDark Leading Scientist in SDSS-III

BigBOSS, The Ground-Based Stage IV BAO Experiment
Feasibility Study (R&D phase) March 2010 – Present
Spokesperson of the Spanish Participation Group, Focal Plane Instrument Scientist

PARTICIPATION IN COMMITTEES:

2004-2005 EUSO Science Steering Committee, EUSO consortium

2004 Future Instrumentation for Calar Alto, IAA-CSIC/MPIA-MPG

2008 Ramón y Cajal & Juan de la Cierva Selection Committee, ANEP, Ministry of Science & Innovation

2008-2009 Spanish Infrastructure Astronomy Network, Ministry of Science and Innovation, Coordinator of 2-4m telescope class Working Group, member of the instrumentation Group for large telescopes and Deputy of CSIC vice-president in the Steering Committee

2007-2009 Member of the CAHA Executive Committee of the Spanish-German Astronomical Observatory (CSIC & MPG)

2007-2009 Executive Committee Science Park of Granada, CSIC representative

2007-2009 Member of the National Commission for Astronomy, Ministry of Science and Innovation

2006-Present Member of the MAGIC Collaboration Board

2010-Present Member of the MultiDark Steering Committee

2010-Present Member of the SDSS-III Advisory Committee

CONFERENCES ORGANIZED:

1998 American Astronomical Society 192nd Meeting, LOC member, San Diego, USA

2003 Satellites and Tidal Streams, IAC-ING International Workshop, Co-Chair SOC, LOC Chair, Astronomical Society of the Pacific Conference Series, Volume 327, 2004. Editor(s): Prada, F.; Martinez Delgado, D.; Mahoney, T., La Palma, Spain

2007 Spectroscopy in Cosmology and Galaxy Evolution 2005-2015, International Workshop, Co-Organizer, Granada, Spain

2008 “Blas Cabrera” Workshop on Wide-Field Survey Spectroscopy with GTC, Co-Organizer, Mexico City, Mexico

2008 Cosmologies Across Cultures, International Workshop, Co-Chair SOC, Granada, Spain, Astronomical Society of the Pacific Conference Series, Volume 409, 2009, Edited by J. A. Rubiño-Martín, J. A. Belmonte, F. Prada, and A. Alberdi.

2008 Calar Alto Future Instrumentation Workshop, Co-Organizer, Granada, Spain

2008 COSMOSIM European Science Foundation Workshop, Co-Organizer, Granada, Spain

2009 MAGIC Dark Matter Workshop, Co-Organizer, Granada, Spain

RESEARCH GRANTS (last 10 years):

2001-2003 “Astrophysics”, Junta de Andalucía, PI. E. Battaner

2003-Present “Galaxies and Cosmology”, Junta de Andalucía, P.I. J. Masegosa

2001-2004 “Science Commissioning of LIRIS”, National Plan of Astronomy and Astrophysics, PI. A. Manchado

2006-2008 “Galaxy systems: components, properties, and large-scale structure. Dark matter detectability”, National Plan of Astronomy and Astrophysics, PI. F. Prada

2005-2006 “Dwarf spheroidals in the Local Group”, Spain-Poland CSIC Collaboration Project, PI. F. Prada and E. Lokas

2005-2006 “Galaxies in voids”, Spain-Germany MEC Collaboration Project, PI. F. Prada & V. Mueller

2004-2007 “Satellites and dwarf galaxies as probes of dark matter”, National Science Foundation (USA), PI. A. Klypin

2006-2007 “Study and prospects of future high-z spectroscopic surveys”, CSIC starting grant, PI. F. Prada

2007-2008 “SIDE Feasibility Study: a common-user spectrograph for GTC”, National Plan of Astronomy and Astrophysics, PI. F. Prada

2008 “COSMOSIM Workshop”, European Science Foundation, PI. F. Prada

2008-2009 “GLAST and Dark Matter Substructure in the Milky Way”, NASA, PI. P. Madau

2009 “Super Ifu Deployable Experiment: a common-user instrument for the Gran Telescopio Canarias”, National Plan of Astronomy and Astrophysics, PI. F. Prada

2010 “The high-z Universe: SIDE/MINISIDE, the survey spectrograph for the GTC”, National Plan of Astronomy and Astrophysics, PI. F. Prada

2010-2014 “MultiDark - Multimessenger Approach for Dark Matter Detection”, Consolider-Ingenio Program, PI. C. Muñoz

2011-2013 “Cosmology and large extragalactic surveys”, National Plan of Astronomy and Astrophysics, PI. F. Prada

2011-2012 “Cosmology with the BOSS and BigBOSS spectroscopic surveys”, i-LINK CSIC Project IAA/Berkeley Lab, PI. F. Prada and D. J. Schlegel

TALKS AT MAJOR INTERNATIONAL CONFERENCES:

1994 “Spectroscopic studies of the disk and halo of M82”, Oral Presentation. The Opacity of Spiral Disks, NATO Workshop, Cardiff, UK

1997 “Stellar counter-rotation along the Hubble sequence: A probe for galaxy formation scenarios”, Oral Presentation. The IAU Symposium 186, Galaxy Interactions at Low and High Redshifts, Kyoto, Japan.

2000 “Present and future instrumentation on the Calar Alto observatory”, Oral Presentation. Highlights of the Spanish Astrophysics II, Proceedings of the 4th Scientific Meeting of the Spanish Astronomical Society, Santiago, Spain.

2003 “Observing the dark matter density profiles of isolated galaxies from SDSS satellite dynamics”, Oral Presentation. Satellites and Tidal Streams, La Palma, Spain

2005 “Dark matter detectability with Cherenkov telescopes”, Invited Talk. New Worlds in Astroparticle Physics, Faro, Portugal

2005 “Satellites: SDSS”, Oral Presentation. Dynamics of Galaxies: Baryons and Dark Matter, Las Vegas, USA

2005 “Dark matter halos from satellite dynamics”, Invited Review. Mass profiles and shapes of cosmological structures, 21st IAP Colloquium, Paris, France

2005 “Dark matter halos of isolated galaxies”, Invited Talk. Nearly Normal Galaxies in a LCDM Universe, Santa Cruz, USA

2006 “Mass growth of isolated galaxies from $z=1$ to the present”, Invited Talk. Galaxies in the Cosmic Web, Las Cruces, USA

2007 “Halo Profiles and the Status of Gamma-ray Observations”, Invited Review. CERN & ENTApP Dark Matter Visitor's Programme, CERN, Ginebra, Switzerland

2008 “Observational Evidences of Dark Matter”, Invited Professor, Lectures. International School on AstroParticle Physics 2008: Dark Matter in Astrophysics and Particle Physics, Madrid, Spain

2009 “Galaxy Masses from Satellite Dynamics”, Invited Talk. Unveiling the Mass: Extracting and Interpreting Galaxy Masses, and a Celebration of Vera Rubin’s career, Kingston, Canada

2010 “BigBOSS fiber positioner: developments”, Oral Presentation. CosmoZsurvey: International Meeting on Cosmology with Redshift Surveys, Marseille, France

RECENT RESEARCH SEMINARS:

In the last few years I have given research seminars at: Ann Arbor, Michigan; Max-Planck Institut fuer Astrophysik Garching, Physik Institut in Zurich; Universidad Autonoma Madrid; The University of Chicago; UC Berkeley; UC Santa Cruz; Stanford University; Mexico Polytechnic Institute; LBNL Berkeley; Universidad de Salamanca; Instituto de Astrofísica de Canarias; The University of Washington; New Mexico State University; Astrophysikalisches Institut Potsdam

MEDIA:

2003 Sloan Digital Sky Survey Probes Dark Matter Theory,
<http://www.sdss.org/news/releases/20030521.darkmatter.html>

2009 How transparent is the Universe? MAGIC discovers the most distant very-high energy gamma-ray emission from an accreting super-massive black hole,
<http://www.magic.mppmu.mpg.de/physics/recent/3C279/index.html>

2010 Obseving the Universe – CSIC press-release on the SIDE fiber positioner instrument (in spanish), <http://www.csic.es/web/guest/noticias>

OBSERVING EXPERIENCE:

As a Support Astronomer at the Isaac Newton Group of Telescopes at La Palma (see <http://www.ing.iac.es/>), from 1995-1997 and 2002-2003; and as Resident Astronomer at the Spanish-German Astronomical Centre (see www.caha.es) from 1999 to 2002, I got extensive experience in the operation, calibration and commissioning of a diverse and large number of optical and near-IR instruments.

PATENTS:

"Fiber positioner device for multi-object spectrographs", Ref. PCT/ES2010/070279. Presented on April 30th, 2010

SOFTWARE AND DATA:

- Dark Matter ALL-SKY maps: On-line material for the paper "Dark Matter Decay and Annihilation in the Local Universe: CLUES from *Fermi*", A.J. Cuesta *et al.* Ap.J. Letters, Volume 726, L6, 2011. See <http://dae47.iaa.es:8080/side/darkmattermaps/>
- Extragalactic Background Light Model: On-line material for the paper "Extragalactic Background Light Inferred from AEGIS Galaxy SED-type Fractions", A. Domínguez *et al.*, accepted by MNRAS. See <http://dae47.iaa.es:8080/side//EBL/>
- The MultiDark database provides results from cosmological simulations performed within the MultiDark project. This database can be queried by entering SQL statements directly into the *Query Form*. The MultiDark Database and the web application providing online access to it were constructed as part of the activities of the German Astrophysical Virtual Observatory as result of collaboration between the AIP and the Spanish MultiDark Consolider Project. See www.multidark.org

REFEREED PUBLICATIONS: 113

NON-REFEREED PUBLICATIONS: 76

BOOKS EDITED: 2

TOTAL NUMBER OF CITATIONS (Jan/2011): 4558

LIST OF PUBLICATIONS IN REFEREE JOURNALS:

1. Prada,F., Beckman,J.E., McKeith,C.D., Castles,J., Greve,A., Wavelength-dependent kinematics in the dusty inclined galaxy NGC 2146, *Ap. J. Lett.*, 423, L35-38, 1994
2. Prada,F., Greve,A., McKeith,C.D., NGC 1569: Identification from CaII infrared line spectra of the objects A, B as superluminous star clusters, *A&A*, 288, 396-400, 1994
3. McKeith,C.D., Greve,A., Downes,D., Prada,F., The outflow in the halo of M82, *A&A*, 293, 703-709, 1995
4. Prada,F., Manchado,A., Canzian,B., Peletier,R.F., McKeith,C., Beckman,J.E., The kinematics of the ionized and molecular hydrogen in the starburst galaxy NGC 253, *Ap. J.*, 458, 537-542, 1996
5. Prada,F., Gutiérrez,C.M., Peletier,R.F., McKeith,C.D., A counterrotating bulge in the Sb Galaxy NGC 7331, *Ap. J. Lett.*, 463, L9-12, 1996
6. Zhao,H., Prada,F., New parameterizations of non-gaussian line-of-sight velocity distribution, *M.N.R.A.S.*, 282, 1223-1235, 1996
7. Simonneau,E., Prada,F., Crivellari,L., Absorption and emission coefficients of non-equilibrium plasmas, *Il Nuovo Cimento B*, 113, 361-374, 1998
8. Prada, F., Gutiérrez,C.M., McKeith,C.D., The stellar and gaseous kinematics in NGC 253, *Ap. J.*, 495, 765-773, 1998
9. Guerrero, M.A., Garcia-López,R.J., Corradi,R.L.M., Jiménez, A., Fuensalida,J.J., Rodríguez-Espinosa,J.M., Alonso,A., Centurión,M., Prada,F., Extinction over the Canarian observatories: the limited influence of Saharan dust, *New Astronomy Review*, 42, 529-532, 1998
10. Prada,F., Gutiérrez,C.M., Counterrotating central component in the barred galaxy NGC 5728, *Ap. J.*, 517, 123-129, 1999
11. Peletier,R.F., Balcells, M., Davies,R.L., Andredakis,Y., Vazdekis,A., Burkert,A., Prada, F., Galactic bulges from Hubble Space Telescope NICMOS observations: ages and dust, *M.N.R.A.S.* 310, 703-716, 1999
12. Peletier,R.F., Vazdekis,A., Arribas,S., del Burgo,C., Garcia-Lorenzo,B., Gutiérrez,C., Mediavilla,E., Prada, F., Two-dimensional line-strength maps in three well-studied early-type galaxies, *M.N.R.A.S.* 310, 863-878, 1999
13. Klypin,A., Kravtsov,A.V., Valenzuela,O., Prada,F., Where are the missing galactic satellites? *Ap. J.*, 522, 82-92, 1999
14. Krabbe,A., Sams,B.J., Genzel,R., Thatte,N., Prada,F., Near infrared imaging spectroscopy of NGC 1275, *A&A*, 354, 439-452, 2000
15. Guerrero,M.A., Villaver,E., Manchado,A., Garcia-Lario,P., Prada,F., H₂ and Brgamma narrowband imaging of bipolar planetary nebulae, *Ap. J. Supp. Ser.*, 127, 125-140, 2000
16. Vasevicius,V., Vazdekis,A., Prada,F., A photometric system for metallicity mapping in Galaxies, *Ap&SS*, 276, 915-920, 2001
17. Tovmassian,G.H., Stasinska,G., Chavushyan,V.H., Zharikov,S.V., Gutiérrez,C., Prada,F., SBS 1150+599A: An extremely oxygen-poor planetary nebula in the Galactic halo? *A&A*, 370, 456-467, 2001
18. Ofek,E.O., Maoz,D., Prada,F., Kolatt,T., Rix,H.-W., A survey for large-separation lensed FIRST quasars, *M.N.R.A.S.* 324, 463-472, 2001
19. Bettoni,D., Galletta,G., Prada,F., The visible environment of galaxies with counterrotation, *A&A*, 374, 83-91, 2001
20. Cenarro A.J., Cardiel N., Gorgas J., Peletier R.F., Vazdekis A., Prada, F., Empirical calibration of the near-infrared Ca II triplet - I. The stellar library and index definition, *M.N.R.A.S.* 326, 959-980, 2001
21. Fan X. et al. (including Prada F.), A survey of $z>5.8$ Quasars in the Sloan Digital Sky Survey I: Discovery of three new Quasars and the spatial density of luminous Quasars at $z\sim 6$, *Astron. J.*, 122, 2833-2849, 2001

22. Prada,F., Burkert,A., The fundamental line of the Local Group satellites, *Ap. J. Lett.*, 564, L73-76, 2002
23. McKay T.A., Sheldon,E.S., Johnston,D., Grebel,E.K., Prada,F., Rix,H.-W., Bahcall,N.M., Brinkmann,J., Csabai,I., Fukugita, N.M., Lamb,D.Q., York,D.G., Dynamical confirmation of Sloan Digital Sky Survey weak lensing scaling laws, *Ap. J. Lett.*, 571, L85-88, 2002
24. Garcia-Hernández,D.A., Manchado,A., Garcia-Lario,P., Domínguez,C., Conway,G., Prada,F., Near-IR spectroscopy of planetary nebulae precursors, *A&A*, 387, 955-968, 2002
25. Gutiérrez,C.M., Azzaro,M., Prada,F., The properties of satellite galaxies in external systems. I. Morphology and Structural parameters, *Ap. J. Supp. Ser.*, 141, 61-79, 2002
26. Gutiérrez,C.M., López-Corredoira,M., Prada,F., Eliche, M.C., New light and shadows on Stephan's Quintet, *Ap. J.*, 579, 592-599, 2002
27. Ofek E.O., Rix H.-W., Maoz D., Prada F., A survey for large-separation lensed FIRST quasars - II. Magnification bias and redshift distribution, *M.N.R.A.S.* 337, 1163-1168, 2002
28. Richer M.G., Tovmassian G., Stasinska G., Jameson R.F., Dobbie P.D., Veillet C., Gutiérrez C., Prada F., The α -element abundances in the most oxygen-poor planetary nebula PNG 135.9+55.9, *A&A.*, 395, 929-941, 2002
29. Helmi A., Ivezić Z., Prada, F., Pentericci L., et al., Selection of metal-poor giant stars using the Sloan Digital Sky Survey photometric system, *Ap.J.* 586, 195-200, 2003
30. Fan X. et al. (including Prada F.), A survey of $z>5.7$ Quasars in the Sloan Digital Sky Survey II: Discovery of three additional quasars at $z>6$, *Astron. J.*, 125, 1649-1659, 2003
31. Pentericci L., Rix H.-W., Prada F., Fan X., Strauss M.A., Schneider D. P., Grebel E. K., Harbeck D., Brinkmann J., Narayanan V. K., The near-IR properties and continuum shapes of high redshift quasars from the Sloan Digital Sky Survey, *A&A.*, 410, 75-82, 2003
32. Prada F., Vitvitska M., Klypin A., Holtzman J.A., Schlegel D.J., Grebel E.K., Rix H.-W., Brinkmann J., McKay T.A., Csabai, I., Observing the dark matter density profile of isolated galaxies, *Ap.J.* 598, 260-271, 2003
33. Kniazev A.Y., Grebel E.K., Pustilnik S.A., Pramskij A.G., Kniazeva T.F., Prada F., Harbeck D., Low-surface-brightness galaxies in the Sloan Digital Sky Survey. I. Search method and test sample, *Astron. J.*, 127, 704, 2004
34. Lee, B.C. et al. (including Prada, F.), A catalog of compact groups of galaxies in the SDSS commissioning data, *Astron. J.*, 127, 1811, 2004
35. Simonneau, E., Prada, F., Structural properties of spherical galaxies: a semi-analytical approach, *Rev. Mex. AA* 40, 69, 2004
36. Gnedin, N. Y., Prada, F., The damping wing of the Gunn-Peterson absorption and Ly α emitters in the pre-reionization era, *Ap. J. Lett.*, 608, L77-80, 2004
37. Prada, F., Klypin, A., Flix, J., Martínez, M., Simonneau, E., Dark matter annihilation in the Milky Way galaxy: effects of baryonic compression, *Phys. Review Letters*, 93, 241301-1, 241301-4, 2004
38. Lokas, E.L., Mamon, G.A., Prada, F., Dark matter distribution in the Draco dwarf from velocity moments, *M.N.R.A.S.* 363, 918-928, 2005
39. Pizagno, J., Prada, F., Weinberg, D., Rix, H.-W., Harbeck, D., Grebel, E.K., Bell, E., Brinkmann, J., Holtzman, J., West, A., Dark matter and stellar mass in the luminous regions of disk galaxies, *Ap. J.*, 633, 844-856, 2005
40. Flix,J., Taylor, J E., Martínez,M., Prada,F., Silk,J., Cortina,J., Do the unidentified EGRET sources trace annihilating dark matter in the Local Group?, *Ap&SS*, 297, 299, 2005
41. Castro-Tirado, A., J., et al., (including Prada, F.), GRB 050509b: the elusive optical/nIR/mm afterglow of a short duration, *A&A*, 439, L15, 2005
42. Azzaro, M., Zentner, A. R., Prada, F., Klypin, A. A., The peculiar velocities of satellites of external disk galaxies, *Ap. J.*, 645, 228-239, 2006

43. Lokas, E.L., Prada, F., Wojtak, R., Moles, M., Gottloeber, S., The complex velocity distribution of galaxies in Abell 1689: implications for CDM mass modelling, *M.N.R.A.S.* 366, 26-30, 2006
44. Patiri, S.G., Betancort-Rijo, J.A., Prada, F., On an analytical framework for voids: their abundances, density profiles and local mass, *M.N.R.A.S.* 368, 1132-1144, 2006
45. Gómez-Álvarez, P., Mediavilla, E., Arribas, S., Muñoz, J.A., Sánchez, S.F., Oscoz, A., Prada, F., and Serra-Ricart, M., Recurrence of the Blue Wing Enhancements in the High Ionization Lines of SDSS J1004+4112 A, *Ap. J. Letters*, 645, 5-8, 2006
46. Prada, F., Klypin, A. A., Simonneau, E., Betancort-Rijo, J., Patiri, S., Gottloeber, S., Sánchez-Conde, M. A., How far do they go? The outer structure of dark matter halos, *Ap. J.*, 645, 1001,1011, 2006
47. Mambriñi, Y., Muñoz, C., Nezri, E., Prada, F., Adiabatic compresión and indirect detection of supersymmetric dark matter, *Journal of Cosmology and Astroparticle Physics*, Issue 01, 10, 2006
48. Patiri, S., Betancort-Rijo, J., Prada, F., Klypin, A. A., Gottloeber, S., Statistics of voids in the 2dFGRS, *M.N.R.A.S.* 369, 335-348, 2006
49. Betancort-Rijo, J., Sánchez-Conde, M.A., Prada, F., Patiri, S., Detailed theoretical predictions of the outskirts of dark matter halos, *Ap.J.*, 649, 579, 2006
50. Simon, J., Prada, F., Vilchez, J.M., Blitz, L., Robertson, B., Is there a fundamental line for disk galaxies?, *Ap.J.*, 649, 709, 2006
51. Haislip, J., B., et al., (including Prada, F.), A photometric redshift of $z=6.39\pm 0.12$ for GRB050904, *Nature*, 440, Issue 7081, 181-183, 2006
52. Lokas, E.L., Wojtak, R., Gottloeber, S., Mamon, G.A., Prada, F., Mass distribution in nearby Abell Clusters, *MNRAS*, 367, 1463-1472, 2006
53. Chen, J., Kravtsov, A.V., Prada, F., Sheldon, E.S., Klypin, A.A., Blanton, M.R., Brinkmann, J., Thakar, A.R., Constraining the projected radial distribution of galactic satellites with the Sloan Digital Sky Survey, *ApJ*, 647, 86-101, 2006
54. Patiri, S., Prada, F., Holtzman, J., Klypin, A.A., Betancort-Rijo, J., The properties of galaxies in voids, *MNRAS*, 372, 1710, 2006
55. Patiri, S., Cuesta, A.J., Prada, F., Betancort-Rijo, J., Klypin, A., The alignment of dark matter halos with the cosmic web, *Ap.J. Letters*, 652, L75, 2006
56. Conroy, C., Prada, F., Newman, J., Corton, D., Coil, A.L., Conselice, C.J., Cooper, M.C., Davis, M., Faber, S.M., et al., Evolution in the halo masses of isolated galaxies between $z=1$ and $z=0$: from DEEP2 to SDSS., *ApJ*, 654, 153, 2007
57. Azzaro, M., Patiri, S., Prada, F., Zentner, A., Angular distribution of satellite galaxies from the Sloan Digital Sky Survey Data Release 4, *MNRAS*, 376, L43, 2007
58. Wojtak, R., Lokas, E.L., Mamon, G.A., Gottloeber, S., Prada, F., Moles, M., Interloper treatment in dynamical modelling of galaxy clusters, *A&A*, 466, 437, 2007
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CONTRIBUTION TO CONFERENCES:

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