

# CURRICULUM VITAE

## Personal Data

Surname and first name: LOISEAU, Nora

Date and place of birth: December 27, 1951, Buenos Aires, Argentina

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## Education

April 1977 Physics M.Sc. from Universidad de Buenos Aires, Argentina. MSc thesis on  
*HI High Velocity Clouds*, directed by E. Bajaja

Dec. 1984 PhD in Physics from Universidad Nacional de La Plata; PhD thesis on *The Structure and Kinematics of the Small Magellanic Cloud*, directed by E. Bajaja

## Positions (starting by the most recent)

**Since Feb.01**      Instrument controller (INSCON) for the XMM-Newton satellite of the  
                          ESA (European Space Agency), under INSA contract, at the  
                          ESA/VILSPA station, Spain.

**Oct.99 to Jan.01** Computer Operator for the XMM-Newton satellite at VILSPA station,  
                          Spain.

**Mar.98 to Sep.99** Guest astronomer at the ESA station, VILSPA, Spain.

**Aug.95 to Feb.98** Resident Astronomer for the International Ultraviolet Explorer (IUE) satellite, ESA-VILSPA station, Spain.

**Sep.91 to Jun.95** "Collaborator" at the Instituto de Astrofísica de Canarias (project 10/86), Tenerife, Spain.

**Jul.88 to Dec.90** Assistant Researcher, Astrophysics Department, INPE (Space Research Institut), Brazil.

**Jul.88** Designated for an Assistant Researcher permanent position of the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina, after a leave of two years I resigned for family reasons.

**Jul.81 to Jun.88** Staff Member of the Instituto Argentino de Radioastronomía (IAR) (on leave from Jan. 1985 to Dec. 1987).

**Jan.85 to Dec.87** Max-Planck-Gesellschaft (MPG) fellowship at the Max- Planck-Institut für Radioastronomie (MPIfR), Bonn, Germany.

**1979 to 1981** Fellow of the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) at IAR. Category: "Perfeccionamiento".

**1977 to 1979** Fellow of the CONICET at IAR. Category: "Iniciación".

**1980** Assistant Professor of the Faculty of Engeneering, Universidad de la Marina Mercante, Buenos Aires.

**1974** Assistant of the Mathematics Department of the Faculty of Sciences of the Universidad of Buenos Aires.

## Professional Experience

**Observational astronomy experience** in radio, optical, ultraviolet and X-rays, using ground- and space-based telescopes: 30m radiotelescope of IAR (Argentina), 100m at Effelsberg (Germany), 30m of Pico Veleta (IRAM, Spain), VLA (USA), 15m SEST (ESO, Chile), ESO-1m (Chile), WHT of 4.2m (La Palma, Spain), IUE and XMM satellites.

**Software development and data analysis.** Utilization of packages for data reduction: AIPS, IDL, IRAF, NOD2, GREG, MIDAS, etc, under VMS, UNIX and LINUX. Knowledge of WINDOWS and its associated software (Word Perfect, Excel, etc). Design of WWW facilities in HTML. Installation of Grenoble's software package GAG in INPE's VAX (1989) and in IAC's VAX (1992), and of IRAF in a VILSPA PC (under LINUX).

**XMM instruments control:**

In addition to the nominal duties of INSCONS, I involved myself in:

- Identification of relevant problems of QLA (facility for live analysis of XMM data)
- Suggestions of changes and participation in discussions for improvements of the OLB (operations log browser) and data quality flags.
- Elaboration of a procedure for the observation of ToO targets and collaboration in the Pointing Change Request procedure (after participating together with M.Santos in a significant detection of a GRB and consequent change of pointing, together with P. Rodríguez).
- Collaboration with B.Altieri in the elaboration of statistics of performed time with the PN camera until revolution 250, and interactions with instrument responsible scientists for the analysis of different problems of the instruments.
- Participation in the SAS workshop (VILSPA, 15-18 April 2002) introducing to the reduction of XMM-Newton data.
- Elaboration of an album of selected raw images of every kind of object detected with XMM-Newton, for public relations (visitors of the control room), etc.

**IUE astronomical operations:**

- Preparation of observations and real time observations for the guest astronomers of the IUE satellite during its last episode.
- Member of the IUE Targets of Opportunity team for Comets.
- Responsible for archived IUE data distribution until the creation of direct access facilities,
- Partly responsible for the quality control, helpdesk, etc (see The IUE Data Handling, [http://iuearc.vilspa.esa.es/help/data\\_handling.html](http://iuearc.vilspa.esa.es/help/data_handling.html)).
- Preparation together with N. Schartel of the Documentation of INES in PDF and in HTML, to be recorded in CD ROMs (see IUE Newly Extracted Spectra Documentation, <http://ines.vilspa.esa.es/ines/docs/contents.html>), etc.

**Scientific committees:**

- Referee of a dissertation (C. Rabaca, 1988) and a PhD thesis (C. Tateyama, 1990) and delivery of the course of "Técnicas de Radioastronomía" (PhD in astronomy level) (1991) at INPE, Brazil.
- Referee for the paper 'A Radio-Optical Survey of the North Ecliptic Cap' (Lacy et al. 1995, MNRAS **276**, 614).

**Time allocation committees:**

- Responsible of the 30m radiotelescope time allocation at IAR, Argentina, from 1980 to 1984.
- Member of the time allocation committee for the Itapetinga radiotelescope, Brasil, 1988 - 1989.

**Seminars and talks given** at IAR (Argentina); at the Instituto de Astronomía, UNAM (México); at the Observatoire de Strasbourg (France); at the MPI für Radioastronomie, Bonn (Germany); at the Istituto di Radioastronomia, Bologna (Italy); at Obsevatorio Nacional, Rio de Janeiro (Brazil), at INPE (Brazil), etc.

**Member of astronomical societies:** member of the International Astronomical Union (since 1985), of the Asociación Argentina de Astronomía (1978 - 1988), of the Sociedade Astronómica Brasileira (1990-1991), and of the Sociedad Española de Astronomía (since 1996).

**Knowledge of languages:** Spanish (mother tongue), English, French and Portuguese. Basic knowledge of German and Italian.

**Scientific Meetings Attended** (starting by the most recent ones)  
([+]: with oral and/or poster presentation, [-]: assisting without presentation)

- [+] *ISO to the Peaks*, Villafranca del Castillo, Spain. Feb.2-4. 2000.
- [+] *Micro Cosmos- Macro Cosmos*, Aachen, Germany. Sep. 2-5 1998.
- [+] Ultraviolet Astrophysics Beyond the IUE Final Archive, Sevilla, Spain. Nov. 1997.
- [+] Observational Cosmology with the New Radio Surveys, Tenerife, Spain Jan. 1997.
- [--] 3rd. Annual EVN/JIVE Symposium, Alcalá de Henares, Spain. Oct. 1996.
- [--] *Key Problems in Astronomy*, Tenerife, Spain. Jan. 1995.
- [+] XXIInd General Assembly of the IAU, The Hague, Holland (with IAU support) August 1994.
- [--] V Canary Islands Winter School *The Formation of Galaxies*, Tenerife, Spain. Dec. 1993.
- [--] IV Canary Islands Winter School *Infrared Astronomy*, Tenerife, Spain. Dec. 1992.
- [+] VIIth Latin-American Regional Meeting of the IAU, Viña del Mar, Chile. Nov. 1992.
- [+] Workshop *The Nearest Active Galaxies*, Madrid, Spain. May 1992.
- [+] III Canary Islands Winter School *Star Formation in Stellar Systems*, Puerto de la Cruz, Spain. Dec. 1991.
- [+] XXIth General Assembly of the IAU, Buenos Aires, Argentina (with IAU support). July 1991
- [+] XVIIth annual meeting of the Brasilian Astronomical Society, Caxambu, Brazil (with FAPESP support). Aug. 1990
- [+] VIth Latin-American Regional Meeting of the IAU, Gramado, Brazil, (with FAPESP support). Oct. 1989
- [+] IAU Symposium no. 140 *Galactic and Intergalactic Magnetic Fields*, Heidelberg, FRG, (with IAU support). Jun. 1989
- [+] Workshop *Magnetic Fields and Extragalactic Objects*, Cargèse, France, (with MPG support). May 1987
- [+] Vth Latin-American Regional Meeting of the IAU, Mérida, México, (with IAU support). Oct.1986
- [--] Workshop *Interstellar Magnetic Fields*, Schloss Ringberg, FRG, (with MPG support). Sep. 1986
- [--] XIX General Assembly of the IAU, New Delhi, India, (with IAU support). Nov. 1985
- [--] Workshop *Star Forming Dwarf Galaxies and Related Objects*, Paris, France, (with MPG support). Jul. 1985
- [--] Workshop *Energetic Particles and their Effect on SNR, Galaxies and Jets*, Schloss

Ringberg, FRG, (with MPG support). Mar. 1985

[+] IIId Latin-American Regional Meeting of the IAU, Buenos Aires, Argentina, Nov. 1983.

[+] IIId Latin-American Regional Meeting of the IAU, Mérida, Venezuela, (with IAU support). Jan. 1981.

[+] *International School of the IAU for Young Astronomers*, Rio de Janeiro, (with IAU support). Nov.-Dec. 1977

[+] From 1978 to 1983, participation in all the annual meetings of the Asociación Argentina de Astronomía.

## I. Main Publications

"High impact" papers are indicated with \*\* , "over the average" impact with \* (defining as "high impact" papers the ones that have more than 30 citations, not including auto-citations; and as "over the average" the ones with 8-29 citations, also not including auto-citations). The citations were taken from ADS Journal Query, therefore this is still incomplete and not fully updated.

- 1- LOISEAU, N., BAJAJA, E.: 1981, "Neutral Hydrogen in the Small Magellanic Cloud", Proceedings of the IIId. Latin-American Regional Meeting of the IAU, Rev. Mexicana Astron. Astrof. 6, 55.
- 2- \* BAJAJA, E., LOISEAU, N.: 1982, "A 21 cm Hydrogen Line Survey of the Small Magellanic Cloud", Astron. Astrophys. Suppl. Ser. 48, 71.
- 3- COLOMB, F.R., GIACANI, E.B., LOISEAU, N., MARTIN, M.C., QUINIENTO, Z., SAHADE, J., TESTORI, J.C.: 1984, "A Search for Variable Radiosources at 1410 MHz", Rev. Mexicana. Astron. Astrof. 10, 101-110 .
- 4- LOISEAU, N., BAJAJA, E.: 1984, "El Continuo en 1410 MHz en la Nube Menor de Magallanes", Rev. Mex. Astron. Astrof. 10, 95-100 .
- 5- BECK, R., DETTMAR, R.J., WIELEBINSKI, R., LOISEAU, N., MARTIN, M.C., SCHNUR, G.F.O.: 1984, "Optical Haloes Around Galaxies", The Messenger 36, 29.
- 6- CERSOSIMO, J.C., LOISEAU, N.: 1984, "A low Density Envelope in the 30 Doradus Nebula", Astron. Astrophys. 133, 93.
- 7- COLOMB, F.R., LOISEAU, N., TESTORI, J.C.: 1984, "Neutral Hydrogen in the Fourcade-Figueroa Galaxy (A1332-45)", Astrophys. Letters 24, 139.
- 8- \*\* BAJAJA, E., CAPPA, C.E., CERSOSIMO, J.C., LOISEAU, N., MARTIN, M.C., MORRAS, R., OLANO, C.A., POPPEL, W.G.L.: 1985, "A New General Survey of High Velocity Neutral Hydrogen in the Southern Hemisphere", Astrophys. Journal S. 58, 143.
- 9- LOISEAU, N., HUMMEL, E., BECK, R., WIELEBINSKI, R.: 1987, "High Resolution Polarization Observations of M31", Proceedings of the Workshop " Interstellar Magnetic Fields", (eds. R. Beck and R. Grave), pg. 42.
- 10- \* LOISEAU, N., KLEIN, U., GREYBE, A., WIELEBINSKI, R., HAYNES, R.F.: 1987, "Thermal and Nonthermal Radio Emission from the Small Magellanic Cloud", Astron. Astrophys. 178, 62.
- 11- \* LOISEAU, N., REICH, W., WIELEBINSKI, R., MÜNCH, W., REICH, P.: 1988, "A Survey of an Area Around the North Ecliptic Pole Region at 11 cm Wavelength", Astron. Astrophys. Suppl. Ser. 75, 67.
- 12- \*\* LOISEAU, N., REUTER, H-P., WIELEBINSKI, R., KLEIN, U.: 1988, "A 13CO(2-1) Map of M82", Astron. Astrophys. 200, L1.
- 13- \* BECK, R., LOISEAU, N., HUMMEL, E., BERKHUIJSEN, E., GRAEVE, R., WIELEBINSKI, R.: 1989, "High-resolution polarization observations of M31 - I. Structure of the Magnetic Field in the Southwestern Arm", Astron. Astrophys. 222, 58.
- 14- \* LOISEAU, N., NAKAI, N., SOFUE, Y., WIELEBINSKI, R., REUTER, H-P., KLEIN, U.: 1990, "12CO(2-1) Mapping of M82", Astron. Astrophys. 228, 331
- 15- MAGALHAES, A.M., LOISEAU, N., RODRIGUES, C.V., PIIROLA, V.: 1990, "Magnetic Field Structure in the Small Magellanic Cloud", in IAU Symposium no. 140 : "Galactic and Intergalactic Magnetic Fields" (eds. R.Beck and R. Wielebinski), p. 255. (ADS Abstracts)

- 16-** HARNETT, J.I., LOISEAU, N., REUTER, H.P.: 1990, "12CO(1-0) Observations of Barred Galaxies with Intense FIR Emission" - Proceedings of the VI Latin- American Regional Meeting of the IAU, Rev. Mex. Astron. Astrofis. 21, 245-248 .
- 17-** LOISEAU, N., REUTER, H-P., HARNETT, J.I., BECK, R.: 1991, "12CO(1-0) and 12CO(2-1) Observations of the Barred Spiral Galaxies NGC1385, NGC6221 and NGC7582", in IAU Symposium Nº146: "Dynamics of Galaxies and Molecular Cloud Distribution" (eds F. Combes and F. Casoli), pg 152.
- 18-** LOISEAU, N., COMBES, F.: 1994, "CO Observations of Nearby Active Galaxies" in Proc. of the Conference "Mass Transfer Induced Activity in Galaxies", Lexington KY, USA (ed. I. Shlosman), pg. 228.

## II. Other Publications

- 19-** COLOMB, F.R., TESTORI, J.C., LOISEAU, N.: 1981, "El Continuo en 1420 MHz en los Alrededores de Centaurus A", Bol. de la Asoc. Arg. de Astronomía 27, 162.
- 20-** BAJAJA, E., LOISEAU, N.: 1979, 'Hidrógeno Neutro en la Nube Menor de Magallanes", Bol. Asoc. Arg. de Astr. 25, 87.
- 21-** LOISEAU, N.: 1979, 'Determinación del ancho del haz, el error en el apuntamiento y la eficiencia de la antena del IAR en base a observaciones de N. Thonnard y miembros del IAR" - IAR Internal Report Nr. 12.
- 22-** CERSOSIMO, J.C., LOISEAU, N.: 1980, 'Determinación del primer lóbulo lateral de la antena del IAR" - IAR Internal Report Nr. 23.
- 23-** BAJAJA. E., LOISEAU, N.: 1981, "New HI Observations of the Small Magellanic Cloud", Proceedings of the Workshop "La Structure du Petit Nuage de Magellan", Strasbourg, France, pg. 16.
- 24-** CERSOSIMO, J.C., LOISEAU, N., BAJAJA, E.: 1981, "Detección de la linea de recombinación H166alpha en la dirección de 30 Doradus", Bol. Asoc. Arg. de Astr. 27.
- 25-** COLOMB, F.R., LOISEAU, N., TESTORI, J.C.: 1981, 'Hidrogeno Neutro en la Galaxia Fourcade-Figueroa", Bol. Asoc. Arg. de Astr. 27, 167.
- 26-** BECK, R, DETTMAR, R.J., WIELEBINSKI, R., LOISEAU, N., MARTIN, M.C., SCHNUR, G.F.O.: 1983, 'Photometrie Sudlicher Edge-on Galaxien", Mitt. Astro. Gesellschaft Nr. 60, pg. 440.
- 27-** COLOMB, F.R., LOISEAU, N., WIELEBINSKI, R., REICH, W.: 1983, "Radio-Mapas del Cielo" - Quid 2, Nr. 18, pg. 436.
- 28-** LOISEAU, N., HUMMEL, E., BECK, R., WIELEBINSKI, R.: 1987, "Small Scale Structure of Polarized Emission in M31" (abstract), Proceedings of the V Latin-American Meeting of the IAU, Mérida, México, Rev. Mexicana. Astron. Astrof. 14, 167.
- 29-** LOISEAU, N., REICH, W., WIELEBINSKI, R., MUENCH, W., 1987, "A Deep Radio Survey of the North Ecliptic Pole Region at 11cm", (abstract) Proceedings of the V Latin-American Meeting of the IAU, Mérida, México, Rev. Mexicana Astron. Astrof. 14, 514.
- 30-** MAGALHAES, A.M., LOISEAU, N., PIIROLA, V.: 1987, "Optical Polarimetric Survey of the Small Magellanic Cloud", Proceedings of the Workshop "Magnetic Fields and Extragalactic Objects", Cargese, France (eds. E. Asseo and D. Gresillon), pg. 185.
- 31-** LOISEAU, N., NAKAI, N., WIELEBINSKI, R., SOFUE, Y., KLEIN, U.: 1987, "230 GHz 12CO(2-1) Study of M82", Proceedings of the Conference "Molecular Clouds in the Milky Way and External Galaxies", Amherst, U.S.A., Lecture Notes in Physics Nº315 (eds. R.L.Dickman, R.S.Snell, J.S.Young), pg.407.

- 32-** LOISEAU, N., REUTER, H.P., WIELEBINSKI, R., KLEIN, U.: 1987, "220 GHz 13CO(2-1) Study of M82", Proceedings of the Conference "Molecular Clouds in the Milky Way and External Galaxies", Amherst, U.S.A., Lecture Notes in Physics N°315 (eds. R.L.Dickman, R.S.Snell, J.S.Young), pg.409.
- 33-** MAGALHAES, A.M., LOISEAU, N., RODRIGUES, C.V., PIIROLA, V.: 1991, "The Structure of the SMC Magnetic Field" (abstract) - Proceedings of the VI Latin- American Regional Meeting of the IAU, Rev. Mex. Astron. Astrofis. 21, 710.
- 34-** LOISEAU, N., COMBES, F.: 1993, "Molecular Gas in Five Southern Active Galaxies", Rev. Mex. Astron. Astrofis. 26, 123.
- 35-** GOMEZ, M., LOISEAU, N.: 1995, Spanish listing of astronomical terms in "Multilingual Supplement of the IAU Astronomy Thesaurus", (eds. R. Shobbrook and R. Schobbrook) (see The Astronomy Thesaurus, <http://www.ao.gov.au/library/thesaurus>).
- 36-** VERKHODANOV, O., ANDERNACH, H., VERKHODANOVA, N., LOISEAU, N.: 1997, "Radio Spectra and NVSS Maps of Decametric Sources", Proceedings of the conference Observational Cosmology with the New Radio Surveys (eds. M.Bremer, N.Jackson and I.Pérez-Fournon), p.255.
- 37-** ANDERNACH, H., VERKHODANOV, O., LOISEAU, N.: 1997, "NVSS maps of UTR sources" , Proceedings of the conference Problems of Modern Radioastronomy - 27th Russian Radioastronomical Conference, vol. 1, p. 334 (in Russian).
- 38-** LOISEAU, N., SOLANO, E.: 1997, "Quality Control of the IUE Final Archive", Proceedings of the conference Ultraviolet Astrophysics Beyond the IUE Final Archive (eds. R.González-Riestra, W. Wamsteker and R.A. Harris), p. 715.
- 39-** LOISEAU, N., YURRITA, Y.: 1997, "Current IUE Final Archive Usage", Proceedings of the conference Ultraviolet Astrophysics Beyond the IUE Final Archive (eds. R.González-Riestra, W. Wamsteker and R.A. Harris), p. 719.
- 40-** LOISEAU N., SCHARTEL N.: 1998, "INES - IUE New Extracted Spectra: Documentation", INES - CDROM (see <http://ines.vilspa.esa.es/ines/docs/contents.html>).
- 41-** SANTOS-LLEO M., LOISEAU N., RODRIGUEZ P., ALTIERI B., SCHARTEL N.: 2001, "XMM-Newton observation of GRB011211" (see <http://mailman.mcmaster.ca/mailman/private/aavso-grb-list/0112.gz/msg00029.html> ).