

# Curriculum Vitae

J.A.de Freitas Pacheco  
Observatoire de la Côte d'Azur, B.P. 229, F-06304 Nice Cedex 4, France  
e-mail: pacheco@obs-nice.fr

September 20, 2009

## 1 Informações Pessoais

Nome: **José Antonio de Freitas Pacheco**

Data e local de nascimento: **14/12/1942 em São Paulo**

Carteira de identidade: **nº 2.806.236 (SI/SP)**

Endereço Profissional: **Observatoire de la Côte d'Azur B.P. 4229 - Nice Cedex 4 - 06304 - France**

Endereço Pessoal: **Quartier Figour - 06340 La Trinité - France**  
telefone: **(+33) 4 93 54 72 56**

## 2 Títulos Universitários

**B.Ph. - Universidade de S.Paulo - 1965**

**Docteur es Sciences Physiques - Universidade de Nice - 1971**

**Professor Adjunto - Universidade de S.Paulo - 1977**

**Professor Titular - Universidade de S.Paulo - 1985**

**Pesquisador Titular do CNAP (Comité Nationale des Astronomes et des Physiciens) - Observatoire de la Côte d'Azur - 1995**

## 3 Funções Acadêmicas

**Chefe do Departamento de Astronomia - Universidade de S. Paulo (USP) - 1973/1976**

**Presidente da Comissão de Pós Graduação do IAG-USP - 1973/1977 e 1987/1989**

**Presidente da Sociedade Astronômica Brasileira - 1974 (primeiro presidente e fundador) e 1978/1982**

Presidente da Comissão Brasileira de Astronomia (CNPq) para a UAI - 1974/1979 e Vice-Presidente de 1980/1982

Diretor do Observatório Nacional - CNPq/MCT - 1979/1981

Diretor do Departamento de Astrofísica - Observatório Nacional - 1982/1984

Presidente da Comissão de Pós Graduação do Observatório Nacional - 1982/1986

Diretor do Instituto Astronômico e Geofísico da Universidade de S. Paulo - 1989/1993

Diretor Geral do Observatório da Côte d'Azur - 1994/1999

## 4 Comissões Acadêmicas

Membro da Congregação do IAGUSP - 1972/1979 e 1985/1994

Membro do Conselho Técnico Científico (CTC) do Instituto Nacional de Pesquisas Espaciais (INPE) - 1977/1980 e 1993/1995

Membro do Comite de Física e Astronomia (CNPq) - 1983/1984

Membro do Conselho Universitário da USP - 1989/1993

Membro do Conselho Deliberativo do CNPq - 1990/1992

Presidente da Comissão de Ciências da Engenharia, da Matéria e do Universo da Região PACA (Provence-Alpes-Côte d'Azur) - 1996/1999

Membro do Conselho Científico do Laboratório de Geofísica “Geoscience Azur” - Universidade de Nice-Sophia Antipolis - 1997/1999

Membro do Conselho Científico do Laboratório de Astrofísica da Universidade de Nice-Sophia Antipolis - 2000/2007

Membro do Conselho Regional para o Desenvolvimento Científico e Tecnológico da Região PACA (Provence-Alpes-Côte d'Azur) - 1996/2006

## 5 Associações Científicas

Academia Brasileira de Ciências

Academia de Ciências do Estado de S. Paulo

União Astronômica Internacional

## 6 Honrarias

- Medalha da Sociedade Brasileira para o Progresso da Ciência (SBPC) - 1975

- Medalha do Mérito Científico - Ordem de Comendador - 1995

- Grand-Croix do Mérito Científico - 2000

## 7 Mestrados Orientados

1. Luiz Arakaki - "Evolution of the Galactic Disk and the Light Elements" - Instituto Tecnológico da Aeronáutica - 1972
2. José R. Bonilha - "Wave Propagation in Relativistic Plasmas" - Universidade de S.Paulo - 1973
3. Ronaldo E. Souza - "Evolution of Fossil HII Regions" - Universidade de Minas Geraes - 1973
4. Joel C.C. Filho - "The Production of Light Elements in the Interstellar Medium" - Universidade de S.Paulo - 1974
5. Maria F. Nave - "Some Problems in X-Ray Astronomy" - Universidade de S.Paulo - 1974
6. J.E. Steiner - "A Model for Cygnus X-1" - Universidade de S.Paulo - 1975
7. A. Damineli Neto - "The Binary Source Her X-1" - Universidade de S.Paulo - 1976
8. Laerte S. Junior - "The Masses of Binary X-Ray Sources" - Universidade de S.Paulo - 1976
9. F. Jablonsky - "A Study on Cataclysmic Variables" - Universidade de S.Paulo - 1981
10. L. Viadana - "Mass Loss from Central Stars of Planetary Nebulae" - Observatório Nacional - 1983
11. Sandra dos Anjos - "Some Problems Related with the Evolution of Galaxy Clusters" - Universidade de S.Paulo - 1984
12. T.C.C. da Silva - "Environmental Effects in the Morphology of Galaxies" - Observatório Nacional - 1986
13. S. Junqueira - "Dynamics of Binary Galaxies" - Observatório Nacional - 1986
14. M.A. Gaya - "A Model for the Infrared Emission of NGC 7027" - Universidade de S.Paulo - 1986
15. V.P. Bichara - "A Burst Model for Cen A" - Observatório Nacional - 1987
16. M.A. Machado - "Carbon Abundances in WC Stars" - Observatório Nacional - 1988
17. O.D. Miranda - "Galactic Winds and X-Ray Emission from Elliptical Galaxies" - Universidade de S.Paulo - 1992
18. M. Catelan - "Synthetic Models for the Horizontal Branch Morphology of Globular Clusters" - Universidade de S.Paulo - 1992
19. T. Regimbau - "Les Pulsars: Etude Statistique et Modelisation" - Universidade de Nice-Sophia Antipolis - 1998
20. E. Fornero - "Effetti del Vento Gallattico Sull'Evoluzione Chimica delle Galassie Ellittiche" - Tesi di Laurea - Università degli Studi di Torino - 1998
21. J. Frémaux - "Evolution de Restes de Supernovae: l'influence du milieu interstellaire" - Universidade de Nice-Sophia Antipolis - 2002
22. S. Vincent - "Formation de Systèmes Doubles d'Etoiles Neutrons" - Universidade

de Nice-Sophia Antipolis - 2002

23. S. Peirani - "Recherche de Supernovae Proches" - Universidade de Nice-Sophia Antipolis - 2002

24. F. Durier - "Accrétion versus Fusion dans un Univers Dominé par la Matière Noire" - Universidade de Nice-Sophia Antipolis - 2002

25. D. Gherson - "Croissance de Semences des Trous Noirs Primordiaux" - Universidade de Lyon - 2004

26. N. Juan - "Croissance Non-Adiabatique de Trous Noirs Supermassifs" - Universidade de Nice-Sophia Antipolis - 2004

27. Ch. Filloux - "Processus de Croissance des Trous Noirs" - Universidade de Nice-Sophia Antipolis - 2005

## 8 Teses de Doutorado

1. S.J. Codina - "Formation of Interstellar Grains" - Universidade de S.Paulo - 1977

2. J.E. Steiner - "Accretion Disks in Compact Stars" - Universidade de S.Paulo - 1979

3. R.E. de Souza - "Environmental Effects in Groups and Clusters of Galaxies" - Universidade de S.Paulo - 1983

4. Horácio A. Dottori - "Absorption Spectra, Optical Continuum and Reddening of Normal and Active Nuclei of Spiral Galaxies" - Universidade Federal do Rio Grande do Sul - 1983 (co-direction avec E. Rocha Vieira)

5. M.L.Q. Tancetti - "Evolution of Stellar Population II Systems" - Universidade de S. Paulo - 1987

6. A. Damineli Neto - "Circumstellar Matter around Be Stars" - Universidade de S.Paulo - 1988

7. V.G. Ortega - "Hydrodynamical Models for Elliptical Galaxies" - Observatorio Nacional" - 1989

8. D.F. Lopes - "Peculiar Luminous Stars" - Observatorio Nacional - 1989

9. F.X. de Araújo - "Axi-Symmetric Radiative Driven Winds" - Observatorio Nacional - 1990

10. R. Bruno - "A New Determination of the Density Parameter" - Observatorio Nacional - 1992

11. W.F. Velloso - "A Contribution to the VIRGO Project" - Universidade de S.Paulo - 1992

12. S. Junqueira - "Tidal Effects in Binary Galaxy Systems" - Observatorio Nacional - 1993

13. A.C. Borges - "Spectral Evolution of Elliptical Galaxies" - Universidade de S.Paulo - 1993

14. R.D.D. Costa -"Chemical Abundances in Planetary Nebulae and Symbiotic Systems" - Universidade de S.Paulo - 1993

15. T.P. Idiart - "Calibration of Metallicity Indices: Application to the Galactic Bulge and Bulge of Spirals " - Universidade de S.Paulo - 1995
16. M. Catelan - " Evolutionary Studies of Population II Systems: The Horizontal Branch " - Universidade de S.Paulo - 1996
17. T. Regimbau - "Etoiles Neutrons et Ondes Gravitationnelles" - Universidade de Nice - Sophia Antipolis - 2001
18. E. Lagadec - "Apport des Observations Infrarouges pour l'Étude de la Perte de Masse des Étoiles Évoluées" - Universidade de Nice-Sophia Antipolis - 2005 (co-orientação com D. Mekarnia).
19. S. Peirani - "Aspects Dynamiques et Physiques de la Matire Noire" - Universidade de Nice-Sophia Antipolis - 2005
20. S. Vincent - "Fréquences d'Oscillation des Modes Axisymétriques des Étoiles à Neutrons" - Universidade de Nice-Sophia Antipolis - 2008
21. F. Durier - "Formation et Evolution des Galaxies: Propriét'es Photométriques, Dynamiques et Chimiques" - Universidade de Nice-Sophia Antipolis - 2009
22. Ch. Filloux - "Evolution des Trous Noirs Supermassifs Présents au Coeur des Galaxies" - Universidade de Nice-Sophia Antipolis - 2009

## 9 Artigos Científicos

1. Phase Integrals in Pulsation Theory of Variable Stars. Anais da Academia Bras. de Ciencias 39, 413, 1967
2. Oscillations Radiales Traitées par la Méthode des Integrales de Phase. C.R. Acad. Sc. Paris 266, 1170, 1968
3. Thermal Instability in the Interstellar Gas. A&A 3, 368, 1969
4. Galactic X-Ray Background Component. Nature 227,1270, 1970
5. Synchrotron Emission from High Energy Cosmic-Ray Electrons as an Explanation of the Cosmic X-Ray Excess. A&A 8, 420, 1970
6. X-Ray Emission at 1/4 keV by Bremsstahlung Suprathermal Protons. Nature Phys.Sc. 229, 84, 1971
7. The Propagation of Cosmic Ray Nuclei. A&A 13, 58, 1971
8. On the Heating of the Interstellar Gas. Rev.Bras.de Fisica 2, 29, 1972
9. Extragalactic Cosmic Rays and the Production of Light Elements. A&A 18, 450, 1972
10. A Phenomenological Study of Cosmic Ray Propagation. A&A 23, 337, 1973. J.A. de Freitas Pacheco and F. LeGuet
11. Supernova Remnants and Gamma-Ray Sources. Astrophys. Letters 13, 97,1973
12. The Origin of Cosmic Rays. Astrophys. Letters 15, 155, 1973
13. A Model for the Binary X-Ray Source 2U1700-37. Nature 249, 637, 1974

14. Possible Variations in the Secondary Minimum of HD153919=2U1700-37. *A&A* 33, 131, 1974. J.A. de Freitas Pacheco, J.E. Steiner and G.R. Quast
15. Photoelectric Observations of 2U0900-40. *A&A* 35, 301, 1974. J.A. de Freitas Pacheco and G.R. Quast
16. Origin of the Optical Emission from Sco X-1. *Nature* 253, 699, 1975
17. Masses of Binary X-Ray Sources. *Astrophys. Sp. Sci.* 32, 205, 1975
18. The Spectrum of Cyg X-1:A Theoretical Model. *Astrophys. Sp. Sci.* 39, 487, 1976. J.A. de Freitas Pacheco and J.E. Steiner
19. Characteristics of Nova Scuti 1975. *Rev. Bras. de Fisica* 5, 397, 1975
20. A Revisited Model for the Binary X-Ray Source 3U1700-37 = HD152919. *A&A* 50, 385, 1976
21. The Electromagnetic Emission from Sco X-1. *A&A* 55, 111, 1977. J.A. de Freitas Pacheco, J.E. Steiner and A. Damineli Neto
22. The Chemical Composition of Nova Cephei 1971. *MNRAS* 181, 421, 1977
23. On the He Abundance of Nova Cephei 1971 Ejecta. *MNRAS* 186, 617, 1979
24. The Physical Parameters of HD152667=OAO 1653-40. *A&A* 70, L49, 1978.
25. The Ionization of the Shell of Novae: A Time Dependent Model. *Astrophys. Sp. Sci.* 61, 91, 1979. L. Sodré and J.A. de Freitas Pacheco
26. Search for Black-Holes: The Nature of the Unseen Companions of HD152667 and HD72754. *Rev. Bras. de Fisica* 8, 418, 1978
27. Observational Aspects of Black-Holes (Invited Paper). Proc. First IAU Regional Latin American Meeting-1978, eds. A. Moreno and H. Moreno, pg 203
28. Astronomical Observations with the Optical Multichannel Analyser of the University of S.Paulo. *Rev. Bras. de Fisica* 9, 45, 1979. S.J. Codina and J.A. de Freitas Pacheco
29. Mass Loss from Hot Stars (Review Paper). *Rev. Mex. Astron. y Astrof.* 6, 181, 1981
30. Infrared Excess and Line Emission from Be Stars. *MNRAS* 198, 659, 1982. A. Damineli Neto and J.A. de Freitas Pacheco
31. Mass Loss from Be Stars Derived from UV Spectra. *MNRAS* 199, 591, 1982
32. Analysis of the IUE and Optical Spectra of the Peculiar Be Star HD87643. *A&A* 108, 111, 1982. J.A. de Freitas Pacheco, D. Gilra and S.R. Pottasch
33. Environmental Effects on the Flattening Distribution of Galaxies. *AJ* 88, 1435, 1983. J.A. de Freitas Pacheco, R.E. de Souza and L. Arakaki
34. The Spectrum of HD110432. *A&A Sup.* 57, 239, 1984. S.J. Codina-Landaberry, J.A. de Freitas Pacheco, D.F. Lopes and D. Gilra
35. Statistical Masses of Abell Clusters. *Astrophys. Sp. Sci.* 105, 393, 1984
36. The le Blanc Bands of CN in Comets. *Astrophys. Sp. Sci.* 108, 153, 1985. P.D. Singh, A.Gomes Balboa and J.A. de Freitas Pacheco
37. HD87643 a B[e] Star with a Cold Wind. *A&A* 152, 101, 1985. J.A. de Freitas Pacheco, S.J. Codina-Landaberry, D.F. Lopes and P.L. Selvelli

38. The Chemical Composition of the Nova Muscae 1983 Ejecta. *MNRAS* **214**, 481, 1985. S.J. Codina-Landaberry and J.A. de Freitas Pacheco
39. A New Determination of the Peculiar Virgocentric Velocity of the Local Group of Galaxies. *AJ* **90**, 1007, 1985
40. H-beta Fluxes from Planetary Nebulae. *Rev. Bras. de Fisica* **15**, 70, 1985. L. Viadana and J.A. de Freitas Pacheco
41. New Color and Zanstra Temperatures for 15 Central Stars of Planetary Nebulae. *MNRAS* **220**, 107, 1986. J.A. de Freitas Pacheco, S.J. Codina-Landaberry and L. Viadana
42. More About the Collapse of a Radiating Star. *MNRAS* **220**, 405, 1986. A.K.G. de Oliveira, J.A. de Freitas Pacheco and N.O. Santos
43. Physical Characteristics of two Low-Excitation Planetary Nebulae. *Rev. Mex. Astron. y Astrof.* **15**, 89, 1987. J.A. de Freitas Pacheco and J.G. Veliz
44. The Physical Conditions in SwSt 1: The Central Star and the Nebula. *MNRAS* **227**, 773, 1987. J.A. de Freitas Pacheco and J.G. Veliz
45. The Velocity Dispersion Among Galaxies. *Astrophys. Letters* **27**, 35, 1988. J.A. de Freitas Pacheco and R. Bruno
46. Mass Loss and Carbon Abundance in WC Stars. *AJ* **96**, 365, 1988. J.A. de Freitas Pacheco and M.A. Machado
47. Spectrophotometric Observations of Comet Halley During 1985-1986 Apparition. *MNRAS* **235**, 457, 1988. J.A. de Freitas Pacheco, S.J. Codina and P.D. Singh
48. Mass-to-Luminosity Ratio in Binary Galaxies. *Astrophys. Sp. Sci.* **149**, 141, 1988. J.A. de Freitas Pacheco and S. Junqueira
49. The Chemical Composition of the Emitting Gas in HM Sge. *ApJ* **337**, 520, 1989. J.A. de Freitas Pacheco, S.J. Codina and D.F. Lopes
50. Self Consistent Hydrodynamical Models for E-Galaxies. *AJ* **97**, 1000, 1989. V.G. Ortega and J.A. de Freitas Pacheco
51. A New Estimate of the Galactic Halo Mass. *Astrophys. Sp. Sci.* **153**, 67, 1989. A.C. Borges and J.A. de Freitas Pacheco
52. Chemical Abundance in the SN 1987A Ejecta. *MNRAS* **240**, 179, 1989
53. Friedmann-like Collapsing Radiating Sphere. *ApJ* **342**, 976, 1989. J. Lemos, R. Chan, N.O. Santos and J.A. de Freitas Pacheco
54. Pulsar Test of a Violation of Discret Symmetries in Gravitation. *Phys. Lett. A* **138**, 5, 1989. J. lo Secco, G. Matsas, A. Natale and J.A. de Freitas Pacheco
55. Radiatively Driven Winds with Azimuthal Symmetry: Application to Be Stars. *MNRAS* **241**, 543, 1989. F.X. de Araújo and J.A. de Freitas Pacheco
56. A Spectroscopic Study of Nova Cen 1986. *ApJ* **347**, 483, 1989. J.A. de Freitas Pacheco, R.D.D. Costa and S.J. Codina
57. Gaseous Content of Galaxies Inside Groups. *Rev. Mex. Astron. y Astrof.* **17**, 127, 1989. T.C. Couto da Silva and J.A. de Freitas Pacheco
58. Chemical Abundances of Planetary Nebulae. *An. Acad. Bras. Cienc.* **61**, 389, 1989. J.A. de Freitas Pacheco, R.D.D. Costa, W.J. Maciel and S.J. Codina

59. Analysis of the Optical Emission Lines of SN 1987A. *AJ* **99**, 664, 1990
60. Asymmetric Winds in Be Stars. *Astrophys. Sp. Sci.* **163**, 49, 1990. F.X. de Araújo and J.A. de Freitas Pacheco
61. Metal-Poor Planetary Nebulae with Low Mass Central Stars. *A&A* **239**, 301, 1990. W.J. Maciel, J.A. de Freitas Pacheco and S.J. Codina
62. Ground-Based Observations of Comets Giacobini-Zinner and Hartley-Good. *A&A* **246**, 597, 1991. S.J. Codina, P.D. Singh and J.A. de Freitas Pacheco
63. Abundances of Southern Type I Planetary Nebulae. *A&A* **250**, 159, 1991. J.A. de Freitas Pacheco, W.J. Maciel, R.D.D. Costa and B. Barbuy
64. Diffusion Processes in the Collapse of a Radiating Spherical Body. *Ap.J.* **382**, 255, 1991. R. Chan, L. Herrera, J.A. de Freitas Pacheco and N.O. Santos
65. Chemical Abundances in Symbiotic Nebulae. *A&A* **257**, 619, 1992. J.A. de Freitas Pacheco and R.D.D. Costa
66. A New Age-Metallicity Relation for Galactic Globular Clusters in the alpha-enhanced Scenario: Cosmological Implications. *A&A* **258**, L5, 1992. M. Catelan and J.A. de Freitas Pacheco
67. A Spectroscopic Study of Luminous Peculiar B-type Stars. *A&A* **261**, 482, 1992. D.F. Lopes, A. Damineli Neto and J.A. de Freitas Pacheco
68. Chemical Abundances of Disk Planetary Nebulae. *A&A* **261**, 579, 1992. J.A. de Freitas Pacheco, W.J. Maciel and R.D.D. Costa
69. The AG Car Nebula Revisited. *A&A* **266**, 360, 1992. J.A. de Freitas Pacheco, A. Damineli Neto, R.D.D. Costa and R. Viotti
70. Diquark Abundance in Stellar Matter. *Phys. Review D* **46**, 4754, 1992. J.A. de Freitas Pacheco, J.E. Horvath and J.C.N. de Araújo
71. Mass Loss Rates and C/He Ratios in the Winds of Central Stars of Planetary Nebulae with WC Spectra. *MNRAS* **260**, 401, 1993. J.A. de Freitas Pacheco, R.D.D. Costa, F.X. de Araújo and D. Petrini
72. Oxygen, Sulphur, Argon and the Chemical Evolution of the Galactic Disk. *ApJ* **403**, 673, 1993
73. The Effects of QCD Parameters on the Quark Core Dimensions in Compact Stars. *MNRAS* **260**, 499, 1993. J.A. de Freitas Pacheco, J.E. Horvath, J.C.N. de Araújo and M. Cattani
74. Type I Planetary Nebulae in the LMC: Oxygen, Sulphur and Argon Abundances as Tracers of Chemical Enrichment. *A&A* **271**, 429, 1993. J.A. de Freitas Pacheco, B. Barbuy, R.D.D. Costa and T.P. Idiart
75. He2-90: A Southern Planetary Nebula with Low Metal Abundances. *A&A* **276**, 184, 1993. R.D.D. Costa, J.A. de Freitas Pacheco and W.J. Maciel
76. Analysis of Evolutionary Period Shift Predictions for RR Lyrae Stars in Galactic Globular Clusters. *AJ* **106**, 175, 1993. M. Catelan and J.A. de Freitas Pacheco
77. Dark Matter in Sc Galaxies. *AJ* **106**, 899, 1993. V.G. Ortega and J.A. de Freitas Pacheco
78. Age Differences Between Old Stellar Populations from the HB Morphology-Metallicity

- Diagrams. AJ 106, 1858, 1993. M. Catelan and J.A. de Freitas Pacheco
79. Abundances of Non-Type I Planetary Nebulae in the LMC. A&A 279, 567, 1993. J.A. de Freitas Pacheco, R.D.D. Costa and W.J. Maciel
80. Radiative Wind Models with Azimuthal Symmetry - II: A Latitude-dependent Wind for Be and B[e] Stars. MNRAS 267, 501, 1994. F.X. de Araújo, J.A. de Freitas Pacheco and D. Petrini
81. Oxygen Abundances in the LMC: A Prediction on SNII/SNIa Rates. A&A 283, 32, 1994. B. Barbuy, J.A. de Freitas Pacheco and S. Castro
82. Chemical Abundances of Symbiotic Nebulae - II. A&A 285, 998, 1994. R.D.D. Costa and J.A. de Freitas Pacheco
83. Oxygen as a Tracer of the Galactic Chemical Evolution (Invited Paper). Astron. Astrophys. Transact 5, 127, 1994
84. Horizontal-Branch Models and the Second-Parameter Phenomenon: the case of NGC 288 and NGC 362. A&A 289, 394, 1994. M. Catelan and J.A. de Freitas Pacheco
85. Circularization Time of Binary Galaxies. AJ 108, 1627, 1994. S. Junqueira and J.A. de Freitas Pacheco
86. The Massive Winds of Luminous Peculiar B-Type Stars. Astrophys. Sp. Sci. 219, 267, 1994. F.X. de Araújo and J.A. de Freitas Pacheco
87. Gravitational Waves from Wobbling Pulsars. MNRAS 271, L31, 1994. J.C. Araújo, J.A. de Freitas Pacheco, J.E. Horvath and M. Cattani
88. Empirical Calibration of Metallicity Indices for Single Stellar Populations. AJ 109, 2218, 1995. T.P. Idiart and J.A. de Freitas Pacheco
89. Deformation of Rapidly Rotating Compact Stars. A&A 301, 433, 1995. J.C.N. de Araújo, J.A. de Freitas Pacheco, M. Cattani and J.E. Horvath
90. Horizontal-Branch Models and the Second Parameter Phenomenon II: The case of M13 and M3. A&A 297, 345, 1995. M. Catelan and J.A. de Freitas Pacheco
91. Horizontal Branch Morphology and Hbeta Indices of Globular Clusters. A&A 302, 718, 1995 . J.A. de Freitas Pacheco and B. Barbuy
92. Age and Abundance Effects in Single Stellar Populations. AJ 110, 2408, 1995. A.C. Borges, T. Idiart, J.A. de Freitas Pacheco and F. Thévenin
93. New Abundances of Southern Planetary Nebulae. A&AS 116, 249, 1996. R.D.D. Costa, C. Chiappini, W.J. Maciel and J.A. de Freitas Pacheco
94. The Role of Thermal Instabilities on the Mass Function of MACHOs. ApJ Letters 456, L97, 1996. E.M. Gouveia dal Pino, J.E. Horvath and J.A. de Freitas Pacheco
95. Metallicity and Abundance Ratios in Elliptical Galaxies. MNRAS 278, 841, 1996
96. He 2-104 Revisited. A&A 309, 629, 1996. J.A. de Freitas Pacheco and R.D.D. Costa
97. The Helium-Core Mass at the Helium Flash in Low-Mass Red Giant Stars: Observations and Theory. M. Catelan, J.A. de Freitas Pacheco and J.E. Horvath. ApJ 461, 231, 1996
98. Appearance and Disappearance of the 511 keV Line as a Consequence of Changes in the Annihilation Regime. V.V. Burdyuzha, V.L. Kauts and J.A. de Freitas Pacheco. A&A 313, 485, 1996

99. Metallicity Indices for Multi-Population Models: I. The Galactic Bulge. T.P. Idiart, J.A. de Freitas Pacheco and R.D.D. Costa. AJ 111, 1169, 1996
100. Metal-Rich Globular Clusters of the Galaxy: morphology of the helium-burning clump, and the determination of relative ages through the  $\delta V$  method. PASP 108, 166, 1996. M. Catelan and J.A. de Freitas Pacheco
101. Abundances in Type I Planetary Nebulae: is the Galactic Disk presently oxygen deficient ? A&A 313, 924, 1996. R.D.D. Costa, J.A. de Freitas Pacheco, J.A. de França Jr.
102. Metallicity Indices for Multi-Population Models: II. Bulges of Galaxies. T.P. Idiart, J.A. de Freitas Pacheco and R.D.D. Costa. AJ 112, 254, 1996
103. Chemical Evolution of Elliptical Galaxies: Abundance Determinations from Population Synthesis (Invited Paper). Rev. Mex. Astr. Astrophys. 4, 51, 1996. Conference Series.
104. Age and Abundance Effects in Single Stellar Populations: Application to M31 Clusters. A&A 319, 394, 1997
105. Gas and Dust Release Rates, and Color of Grains in Comets P/Halley, P/Giacobini-Zinner and P/Hartley-Good. P.D. Singh, W.F. Huebner, R.D.D. Costa, S.J. Codina, J.A. de Freitas Pacheco. Plan. Sp. Sci. 45, 455, 1997
106. Atomic Emission Lines in the Spectrum Observed During the Impact Between the L-Fragment of Comet D/Shoemaker-Levy 9 and Jupiter. R.D.D. Costa, J.A. de Freitas Pacheco, P.D. Singh, A.A. de Almeida and S.J. Codina. ApJ 485, 380, 1997
107. The Infrared CaII Triplet as a Metallicity Indicator of Stellar Populations. T.P. Idiart, F. Thévenin and J.A. de Freitas Pacheco. AJ 113, 1066, 1997
108. Constraints on the Early Galactic Cosmic Ray Activity from Light Element Abundances - Astr. Phys. 7, 15, 1997
109. A Photometric System for Detection of Embedded WR Stars. A. Damineli Neto, F. Jablonski, L.C. de Freitas, J.A. de Freitas Pacheco. PASP 109, 633, 1997
110. Gravitational Wave Emission from Galactic Radio Pulsars. J.A. de Freitas Pacheco & J.E. Horvath. Phys. Rev. D 56, 859, 1997
111. The NS-NS Coalescence Rate in Galaxies and its Significance to the VIRGO Gravitational Antenna - Astr. Phys. 8, 21, 1997
112. Changes in the Annihilation Regime Near the Surface of a Neutron Star. V.V. Burdyuzha, V.L. Kauts, J.A. de Freitas Pacheco. Astron.& Astrophys. Trans. 14, 171, 1997
113. Age and Metallicity of Star Clusters in the Magellanic Clouds. J.A. de Freitas Pacheco, B. Barbuy, T.P. Idiart. A&A 332, 19, 1998
114. Do Soft Gamma Repeaters Emit Gravitational Waves ? A&A 336, 397, 1998
115. Evolutionary Models for The Magellanic Clouds: I. The Large Cloud. AJ 116, 1701, 1998
116. Equilibrium Configurations for Quark-Diquark Stars and the Problem of Her X-1 Mass. J.E. Horvath, J.A. de Freitas Pacheco. Int. Jour. Mod. Phys. D 7 ,19, 1998
117. H-Dibaryons and Primordial Nucleosynthesis. J.A. de Freitas Pacheco, S. Stoica,

- F. Thévenin and J.E. Horvath. Phys. Rev. D 59, 027303, 1999
118. Equation of State for Dense Matter: Application to Collapsed Objects (Invited Paper). In Structure and Stability of Nucleon and Nuclear Systems, eds. A.A. Raduta, S.Stoica, I.I. Irsu, World Scientific, Singapore, 1999, p. 547
119. Dynamical Properties of a Sample of Ellipticals. V.G. Ortega, G. Lopes-Vieira and J.A. de Freitas Pacheco. Ap&SS 262, 271, 1999
120. Gravitation Wave Emission from Radio Pulsars Revisited. T. Regimbau and J.A. de Freitas Pacheco. A&A 359, 242, 2000
121. Dredge-up Effects in Galactic and Magellanic Planetary Nebulae. R.D.D. Costa, J.A. de Freitas Pacheco and T.P. Idiart. A&AS 145, 467, 2000
122. Schrodinger-Poisson Model for Very-High Pressure Cold Helium. G. Reinisch, J.A. de Freitas Pacheco, P. Valiron. Phys. Rev. A 63, 042505, 2001
123. VLT Observations of Turnoff Stars in the Globular Cluster NGC 6397. F. Thévenin, C. Charbonnel, J.A. de Freitas Pacheco, T.P. Idiart, G. Jasniewicz, P. de Laverny, B. Plez. A&A 373, 905, 2001
124. Population Synthesis of Pulsars: Magnetic Field Effects. T. Regimbau and J.A. de Freitas Pacheco. A&A 374, 182, 2001
125. Limits on the Early Afterglow Phase of Gamma Ray Bursts from TAROT-1. M. Böer, J.L. Atteia, M. Bringer, B. Gendre, A. Klotz, R. Malina, J.A. de Freitas Pacheco, H. Pedersen. A&A 378, 76, 2001
126. Potential Sources of Gravitational Wave Emission and Laser Beam Interferometers (Invited Paper) - 6th International Workshop on Relativistic Aspects of Nuclear Physics - 2001, eds. T. Kodama et al., World Scientific, p. 158
127. Cosmic Background of Gravitational Waves from Rotating Neutron Stars. T. Regimbau and J.A. de Freitas Pacheco. A&A 376, 381, 2001
128. New UBVRI colour distributions in E-type galaxies: I. The data. T.P. Idiart, R. Michard, J.A. de Freitas Pacheco. A&A 383, 30, 2002
129. A Nuclear Many-Body Theory at Finite Temperature Applied to Protoneutron Stars. G.F. Marranghello, C.A.Z. Vasconcellos, M. Dillig, J.A. de Freitas Pacheco. Int.J.Mod.Phys. E 11, 83, 2002
130. Phase Transitions in Neutron Stars and Gravitational Wave Emission. G.F. Marranghello, C.A.Z. Vasconcellos, J.A. de Freitas Pacheco. Phys.Rev. D 66, # 064027, 2002
131. Quark-Diquark Matter Equation of State: The role of interactions. J.E. Horvath, G. Lugones, J.A. de Freitas Pacheco. Int.J.Mod.Phys. D12, 519, 2003
132. New UBVRI color distributions in E-type galaxies: II. Central and mean metallicities. T.P. Idiart, R. Michard, J.A. de Freitas Pacheco. A&A 398, 949, 2003
133. Searching Gravitational Waves from Pulsars Using Laser Beam Interferometers. T. Regimbau & J.A. de Freitas Pacheco. A&A 401, 385, 2003
134. Formation and Cosmic Evolution of Elliptical Galaxies. J.A. de Freitas Pacheco, R. Michard, R. Mohayaee, 2003, in "Recent Research Developments in Astronomy and Astrophysics" (Review Paper), vol 1, p.271

135. The angular momentum of dark halos: merger and accretion effects. S. Peirani, R. Mohayaee, J.A. de Freitas Pacheco. MNRAS 348, 921, 2004
136. Indirect Search for Dark Matter: Prospects for GLAST. S. Peirani, R. Mohayaee, J.A. de Freitas Pacheco. Phys. Rev. D 70, 043503, 2004
137. Dark Matter in the Universe (Review Paper) - Workshop on Relativistic Astrophysics and Astroparticles. J.A. de Freitas Pacheco & S. Peirani. Int.J.Mod.Phys. D 13, 1335, 2004
138. Dust Temperature and Density Profiles in the Envelopes of AGB and post-AGB Stars from Mid-Infrared Observations. E. Lagadec, D. Mekarnia, J.A. de Freitas Pacheco, C. Dougados. A&A 433, 553, 2005
139. Detector Optimisation for Gravitational Waves by Inspiralling Binaries. A. Spallicci, S. Aoudia, J.A. de Freitas Pacheco, T. Regimbau & G. Frossati. Class. Quantum Grav. 22, S461, 2005
140. A Search for Very Active Stars in the Galaxy: First Results. G. Tsarevsky, J.A. de Freitas Pacheco, N. Kardashev, P. de Laverny, F. Thévenin, O.B. Slee, R.A. Stathakis, E. Barsukova, V. Goransky and B. Komberg. A&A, 438, 949, 2005.
141. Indirect Search for Dark Matter. J.A. de Freitas Pacheco and S. Peirani. Gravitation & Cosmology, 11, 169, 2005.
142. Expected Coalescence Rate of Double Neutron Stars for Ground-Based Interferometers. T. Regimbau, J.A. de Freitas Pacheco, A. Spallicci and S. Vincent. Class. Quantum Grav., 22, S935, 2005
143. Einstein's Gravitational Lensing and Non-Linear Electrodynamics. H.J. Mosquera Cuesta, J.A. de Freitas Pacheco and J.M. Salim. Int.J.Mod.Phys. A, 21, 43, 2006 - astro-ph/0408152
144. New Insights on the Complex Planetary Nebula Hen 2-114. E. Lagadec, O. Chesneau, M. Matsuura, O. de Marco, J.A. de Freitas Pacheco, A. Zijlstra, A. Acker and G.C. Clayton. A& A 448, 203, 2006
145. Mass Determination of Groups of Galaxies: Effects of the Cosmological Constant. S. Peirani and J.A. de Freitas Pacheco. New Astron. 11, 325, 2006 - astro-ph/0508614
146. Gravitational Wave Background from Magnetars. T. Regimbau and J.A. de Freitas Pacheco. A& A 447, 1, 2006
147. Expected Coalescence Rates of NS-NS Binaries for Laser Beam Interferometers. J.A. de Freitas Pacheco, T. Regimbau, S. Vincent and A. Spallicci. Int.J.Mod.Phys. D 15, 235, 2006 - astro-ph/0510727
148. Are Neutron-Rich Elements Produced in the Collapse of Strange Dwarfs ?. G.F. Marranghello and J.A. de Freitas Pacheco. Int.J.Mod.Phys. D 15, 153, 2006 - astro-ph/0510860
149. Stochastic Background from Coalescences of NS-NS Binaries. T. Regimbau and J.A. de Freitas Pacheco. ApJ 642, 455, 2006 - gr-qc/0512008
150. Evolution of the Phase-Space Density of Dark Matter halos and Mixing Effects in Merger Events. S. Peirani, F. Durier and J.A. de Freitas Pacheco. MNRAS 367, 1011, 2006 - astro-ph/0512482
151. Capture Rates of Compact Objects by Supermassive Black Holes. J.A. de Freitas

- Pacheco, C. Filloux and T. Regimbau. Phys.Rev. D 74, 023001, 2006
152. AMBER, The Near-Infrared Spectro-Interferometric Three-Telescope VLTI Instrument. R.G. Petrov et al. (AMBER Consortium) - A&A 464, 1, 2007
153. Optical Configuration and Analysis of the AMBER-VLTI Instrument. S. Robbe-Dubois et al. (AMBER Consortium) - A&A 464, 13, 2007
154. Interferometric Data Reduction with AMBER-VLTI. Principle, Estimators and Illustration. E. Tatulli et al. (AMBER Consortium) - A&A 464, 29, 2007
155. Disk and Wind Interaction in the Young Stellar Object MWC297 Spatially Resolved with AMBER-VLTI. F. Malbet et al. (AMBER Consortium) - A&A 464, 43, 2007
156. Constraining the Wind Launching Region in Herbig Ae Stars: AMBER-VLTI Spectroscopy of HD 104237. E. Tatulli et al. (AMBER Consortium) - A&A 464, 55, 2007
157. An Asymmetry Detected in the Disk of Kappa Canis Majoris with AMBER-VLTI. A. Meilland et al. (AMBER Consortium) - A&A 464, 73, 2007
158. Near-Infrared Interferometry of Eta-Carinae with Spectral Resolutions of 1500 and 12000 Using AMBER-VLTI. G. Weigelt et al. (AMBER Consortium) - A&A 464, 87, 2007
159. Direct Constraint on the Distance of  $\gamma^2$ -Velorum from AMBER-VLTI Observations. F. Millour et al. (AMBER Consortium) - A&A 464, 107, 2007
160. Ages of Elliptical Galaxies: Single versus Multi Population Interpretation. T.P. Idiart, J. Silk and J.A. de Freitas Pacheco. MNRAS 381, 1711, 2007
161. Generalized Second Law and Phantom Cosmology. J.A. de Freitas Pacheco and J.E. Horvath. Class.Quantum Grav. 24, 5427, 2007
162. Evolution of Primordial Black Holes in a Radiation Phantom Energy Environment. D.C. Guarino, J.E. Horvath, J.A. de Freitas Pacheco and P.S. Custodio. General Relativity Gravitation 40, 1593, 2008 - gr-qc/0711.3641
163. Dark matter accretion into supermassive black holes. S. Peirani and J.A. de Freitas Pacheco. Phys.Rev. D 77, 064023, 2008
164. Dynamics of Nearby Groups of Galaxies: the role of the cosmological constant. S. Peirani and J.A. de Freitas Pacheco. A&A 488, 845, 2008

## 10 Comunicações em Coloquios Internacionais

1. A Theoretical Model for Cyg X-1. Proc. 14th Conference on Cosmic-Rays - Origin and Propagation - 1975, p. 133. J.A. de Freitas Pacheco and J.E. Steiner
2. Mass Loss from  $\pi$ -Aqr. In "Be Stars" - IAU Col. - Munich 1982 - eds. M. Jascheck and H. Grot - Reidel, p.391
3. The Peculiar Object HD87643. In "Be Stars" - IAU Col. - Munich 1982 - eds. M. Jascheck and H. Grot - Reidel, p. 399. J.A. de Freitas Pacheco and D. Gilra
4. The Relative Motion of the Local Group of Galaxies Towards the Virgo Cluster. Rev.

**Mex. Astron. y Astrof.,12,74,1986**

5. Hydrodynamical Models of E-galaxies. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex. Astron. y Astrof.,12,97,1986. V.G. Ortega and J.A. de Freitas Pacheco
6. Spectrophotometry of the Nucleus of NGC 7572. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,12,119,1986. H. Dottori, M. Pastoriza, S.J. Codina-Landaberry and J.A. de Freitas Pacheco
7. The Spectrum of HD 72754. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,12,184,1986. S.J. Codina-Landaberry and J.A.de Freitas Pacheco
8. Spectroscopic Observations of Be Stars. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex. Astron. y Astrof.,12,185,1986. J.A.de Freitas Pacheco, S.J. Codina-Landaberry and D.F. Lopes
9. Photoelectric Scanner Observations of Central Stars of Planetary Nebulae. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,12,191,1986. S.J. Codina-Landaberry, J.A. de Freitas Pacheco, L. Viadana and B. Bazzanella
10. The Spectrophotometer of the National Observatory. Proc. 4th IAU Regional Latin American Meeting - Rev. Mex.Astron. y Astrof.,12,405,1986. S.J. Codina-Landaberry, B. Bazzanella, J.A. de Freitas Pacheco, J.L. Kohl and R. Ribeiro
11. Spectrophotometric Observations of Comet p/Halley. In "On the Diversity and Similarity of Comets" - ESA/SP-278 -1987, p. 627. J.A. de Freitas Pacheco, S.J. Codina-Landaberry and P.D. Singh
12. Neutrinos in the Universe. International Symp. of Physics to Honour M. Schoenberg. ed. A.L.R. Barros - IFUSP 1987, p.62
13. Collapsing Sphere with Heat Flow. In "12th International Conference on General Relativity and Gravitation". J. Lemos, R. Chan, N.O. Santos and J.A. de Freitas Pacheco. Boulder,1989 -vol II, p.424
14. The Chemical Composition of the Emitting Gas in Some Symbiotic Systems. In "International Nuclear Physics Conference' - IUPAP/USP 1989, p.463
15. Chemical Composition of Nova Cen 1986. In "Physics of Classical Novae" - IAU Col.122 - eds. A Cassatella and R. Viotti - Springer-Verlag 1990, p. 206. J.A. de Freitas Pacheco, S.J. Codina-Landaberry and R.D.D. Costa
16. An Estimate of the Tidal Effects in the Dynamics of Binary Galaxies. Proc. 6th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,21,131,1990. S. Junqueira and J.A. de Freitas Pacheco
17. Nova Centauri 1986. Proc. 6th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,21,449,1990. R.D.D. Costa, J.A.de Freitas Pacheco and S.J. Codina-Landaberry
18. The Peculiar Object He2-104. Proc. 6th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,21,515,1990. R.D.D. Costa, J.A. de Freitas Pacheco and S.J. Codina-Landaberry
19. Strongly Metal Deficient Planetary Nebulae. Proc. 6th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof., 21,517,1990. W.J. Maciel, J.A. de Freitas Pacheco and S.J. Codina-Landaberry

20. Is the Ejecta of SN 1987A Enriching the Interstellar Medium of the LMC ? Proc. 6th IAU Regional Latin American Meeting - Rev. Mex. Astron.y Astrof.,21,733,1990
21. He Abundance in Red Giants. IAU Symp. 149 - "The Stellar Populations of Galaxies" -eds. B. Barbuy and A. Renzini - Kluwer 1992,p. 418. R.D.D. Costa and J.A. de Freitas Pacheco
22. Mass Loss from Central Stars of Planetary Nebulae with WC Spectrum. IAU Symp.149 - "The Stellar Populations of Galaxies" - eds. B. Barbuy and A. Renzini - Kluwer 1992,pg 419. J.A. de Freitas Pacheco and R.D.D. Costa
23. Synthetic M/L ratios for E and S Galaxies. IAU Symp.149 - "The Stellar Populations of Galaxies" - eds. B. Barbuy and A. Renzini - Kluwer 1992,pg 394. A.C. Borges and J.A. de Freitas Pacheco
24. Constraints on Cosmology from the Ages of Galactic Globular Clusters. In "Cosmology and Large Structure in the Universe" - PASP Conf.Ser., 24,159,1992. M. Catelan and J.A. de Freitas Pacheco
25. The Great Atractor Influence on the Velocity Dispersion of Galaxies. In "Cosmology and Large Structure in the Universe" - PASP Conf.Ser.,24,173,1992. R. Bruno and J.A. de Freitas Pacheco
26. Carbon to Helium Ratio in the Wind of Central Stars of Planetary Nebulae with WC Spectrum. IAU Symp.150 - "Astrochemistry of Cosmic Phenomena" - eds. P.D. Singh and A. Dalgarno-Kluwer 1992,pg 359. J.A. de Freitas Pacheco, R.D.D. Costa, F.X. de Araújo and D. Petrini
27. Chemical Composition of a Southern Planetary Nebulae Sample. IAU Symp.150 - "Astrochemistry of Cosmic Phenomena" - eds. P.D. Singh and A. Dalgarno-Kluwer 1992,pg 361. R.D.D. Costa and J.A.de Freitas Pacheco
28. The Li-rich Giant CPD-55 395: Li enrichment in the Galaxy. In "Int.Symp.on Nuclear Astrophysics"-Karlsruhe - IOP Publishing Ltd - 1993, p. 43. B. Barbuy, J. Gregorio-Hetem and J.A. de Freitas Pacheco
29. New Results on ETA and AG Carinae. in "Science with the Hubble Space Telescope " - eds. P. Benvenuti and E. Schreier - ESO 1992, p. 369. G.B. Baratta, R. Viotti, V. Polcaro, A.D. Neto, J.A. de Freitas Pacheco, A. Altamore, C. Rossi
30. Cosmic Rays in the Early Galaxy. In Proc.of Vulcano Workshop in "Frontier Objects in Astrophysics and Particle Physics" - eds. F. Giovannelli and G. Mannocchi - Editrice Compositori - Bologna 1993,p. 401. J.A. de Freitas Pacheco and B. Barbuy
31. Spectrophotometry and Multicolor Imagery of the Planetary Nebula around the PCyg Star AG Car. In IAU Symp.155 - Planetary Nebulae - eds. R. Weinberger and A. Acker - Kluwer, 1993, p.217. C. Rossi, A. Altamore, R.D.D. Costa, A. Damineli, J.A. de Freitas Pacheco, A.Cassatella, A.Marenzi, P.Persi, V.Polcaro and R. Viotti
32. Chemical Abundances of Planetary Nebulae in the LMC. In IAU Symp. 155 - Planetary Nebulae -eds. R. Weinberger and A. Acker - Kluwer,1993 ,p.586. R.D.D. Costa and J.A. de Freitas Pacheco
33. Oxygen Abundance in the LMC. Proc. 7th IAU Reg. Latin-American. Rev. Mex. Astron. y Astrof. 26,119,1993. B. Barbuy and J.A.de Freitas Pacheco
34. Dybaryons in Dense Nuclear Matter. In Physical Processes in Astrophysics - eds.

- I.W. Roxburg and J.L. Masnou - Springer, 1993, p.227
35. O, S, Ar from Planetary Nebulae Data and the Chemical Evolution of the Galactic Disk. In IAU Symp. 155 - Planetary Nebulae - eds. R. Weinberger and A. Acker - Kluwer, 1993, p. 586
36. High Resolution Near-IR Spectroscopy of Luminous Blue Variables. In Astronomical Infrared Spectroscopy: Future Observational Direction - ed. Sun Kwok, PASP 41, 133, 1993. D.F. Lopes, R. Viotti, J.A. de Freitas Pacheco, A. Damineli, G.B. Baratta.
37. Infrared Spectroscopy of Be Stars. In IAU Symp. 162 - Pulsation, Rotation and Mass Loss in Early-Type Stars - eds. L. Balona, H.F. Henrichs and J.M. LeContel - Kluwer, 1994, p.412. R.Torres, A. Damineli and J.A. de Freitas Pacheco
38. Stellar Populations and Metallicity of M32. In Dwarf Galaxies, ESO/OHP Workshop, eds. G. Meylan, P. Prunier, ESO Workshop and Conference Proceedings 1994, n.49, p.493. B. Barbuy, J.A. de Freitas Pacheco and A.C. Borges
39. Evolutionary Aspects of the CMD of NGC 6553. M. Catelan, B. Barbuy, J.A. de Freitas Pacheco, S. Ortolani and E. Bica. In Stellar Populations, IAU Symp 164, eds. P. van der Kruit, G. Gilmore, Kluwer-Dordrecht, 1994, p. 407
40. The  ${}^6Li/{}^7Li$  ratio and the Evolution of the Early Galaxy. J.A. de Freitas Pacheco, B. Barbuy and R.D.D. Costa - MmSAI 66, 461, 1995
41. Chemical Evolution of the Galaxy. Proc. 20th Meeting of Brazilian Astronomical Society - eds. B. Barbuy, N.V. Leister, J. Braga - IAGUSP - S.Paulo, 1995, p. 141
42. Estimation of [Mg/Fe] Ratios in Early-Type Galaxies. B. Barbuy, J.A. de Freitas Pacheco, T.P. Idiart. in New Light on Galaxy Evolution, IAU Symp. 171, ed. R. Bender, R.L. Davies, Kluwer-Dordrecht, 1996, p. 340
43. Chemical Abundances for a Planetary Nebulae Sample Located Outside the Solar Circle. R.D.D. Costa, C. Chiappini, W.J. Maciel and J.A. de Freitas Pacheco. In Advances in Stellar Evolution, ed. R. Rood, Cambridge University Press, 1997, p. 159
44. Global Analysis of a Southern Planetary Nebulae Survey. R.D.D. Costa and J.A. de Freitas Pacheco - Planetary Nebulae - IAU Symp. 180, eds. H. Habing, H.J.G.L.M. Lamers, Kluwer, 1996, p. 217
45. Light Element Abundances. Workshop on Stellar Abundances, eds. B. Barbuy, W.J. Maciel and J. Hetem - University of S.Paulo - 1996, pg. 43
46. Chemical Evolution of Elliptical Galaxies. Workshop on Stellar Abundances, eds. B. Barbuy, W.J. Maciel, J. Hetem - University of S.Paulo - 1996, pg. 10
47. Gravitational Waves from Precessing Millisecond Pulsars. J.C.N. Araújo, J.A. de Freitas Pacheco, J.E. Horvath, in Omnidirectional Gravitational Radiation, eds. W.F. Veloso, O.D. Aguiar, N. Magalhaes, World Scientific, Singapore, 1997, p. 67
48. Statistical Approach to the GW Emission from Radio Pulsars. J.E. Horvath and J.A. de Freitas Pacheco, in Omnidirectional Gravitational Radiation, eds. W.F. Veloso, O.D. Aguiar, N. Magalhaes, World Scientific, Singapore, 1997, p. 63
49. Chemical Evolution of the Large Magellanic Cloud. In Science with Gemini, eds. B. Barbuy, E. Lapasset, R. Baptista, R.C. Fernandes, IAGUSP press, 1998, p. 95
50. Single Population Models: Age and Metallicity of Stellar Clusters. in Abundance Profiles: Diagnostic Tools for Galaxy History, PASP Conf. Series 147, 205, 1998

51. Mass Loss Rates from B[e] Stars. In B[e] Stars, eds. A.M. Hubert and C. Jaschek, Kluwer, 1998, p. 221
52. Tarot: a Status Report. M. de Boer, J.-L. Atteia, M. Bringer, A. Klotz, C. Peignot, R. Malina, P. Sanchez, H. Pedersen, G. Calvet, J. Eysseric, A. Leroy, M. Meissonier, C. Pollas and J.A. de Freitas Pacheco. In Gamma-Ray Bursts: 4th Huntsville Symposium. Eds. C.A. Meegan, R.D. Preece, T.M. Koshut. AIP Conference Proceedings, New York, 1998, p.846
53. Chemical Abundances of Newly Discovery Planetary Nebulae in the Galactic Bulge. R. Costa, W. Maciel, J.A. de Freitas Pacheco. In Galaxy Evolution: Connecting the Distant Universe with the Local Fossil Record. Paris-Meudon Observatory - 1998
54. Chemical Evolution of Bulges with Nuclear Activity. T.P. Idiart, R.D.D. Costa and J.A. de Freitas Pacheco. Ap&SS 265, 391, 1999
55. A Possible Connection Between Magnetars and Gamma-Ray Bursts. M.P. Allen, J.E. Horvath and J.A. de Freitas Pacheco. RMxA Conf. Ser. 11, 39, 2001
56. Diquark Degrees of Freedom in the EOS and Compact Stars. J.E. Horvath, G. Lugones and J.A. de Freitas Pacheco in Compact Stars in the QCD Phase Diagram, workshop held in the Niels Bohr Institute, Copenhagen, 2001 - astro-ph/0112159
57. Chemical Evolution of the Magellanic Clouds. B. Barbuy, J.A. de Freitas Pacheco, T.P. Idiart. in IAU Symp. 187, eds. K. Nomoto & J.W. Truran, 2002, Dordrecht, Kluwer Academic Publishers, p.195
58. Neutrino pair synchrotron emission from magnetars. J.A. de Freitas Pacheco and T. Regimbau. Proc. Workshop on Strong Magnetic Fields and Neutron Stars - eds. C.Z. Vasconcellos, H.M. Cuesta, H. Perez, Springer Verlag, 2003
59. Finite Temperature Effective Field Theory for Proto-Neutron Stars. G.F. Marranghello, C. Z. Vasconcellos, M. Dillig, J.A. de Freitas Pacheco, H. Coelho. Proc. of the VIII International Workshop on Hadron Physics, eds. C.Z. Vasconcellos, V. Herscovitz, D. Hadjimichef, B.E.J. Bodmann, World Scientific, Singapore, 2003, p.387
60. Gravitational Wave Emission from Phase Transition Inside Neutron Stars. G.F. Marranghello, C.Z. Vasconcellos, J.A. de Freitas Pacheco, M. Dillig, H. Coelho. Proc. of the VIII International Workshop on Hadron Physics, eds. C.Z. Vasconcellos, V. Herscovitz, D. Hadjimichef, B.E.J. Bodmann, World Scientific, Singapore, 2003, p.391
61. New Aspects on Gravitational Wave Emission from Neutron Stars. G.F. Marranghello, C.Z. Vasconcellos, J.A. de Freitas Pacheco, M. Dillig, H. Coelho. International Workshop on Relativistic Astrophysique and Astroparticles - Int.J.Mod.Phys. D 13, 1293, 2004
62. Four Years of Observations of GRB with TAROT. M. Boer, A. Klotz, C. Thiébaud, J.-L. Atteia, R. Malina, J.A. de Freitas Pacheco and H. Pedersen. AIP Conf. Proc. vol 727, 447, 2004
63. Dust Temperature and Density in the Red Retangle Nebula from Mid-Infrared Observations. E. Lagadec, J.A. de Freitas Pacheco and D. Mekarnia. ASP Conf. Proc. 313, 371, 2004.
64. Structure of the Planetary Nebula NGC 7027. D. Mekarnia, J.A. de Freitas Pacheco and E. Lagadec. ASP Conf. Proc. 313, 119, 2004.

65. Infrared High Spatial Resolution Study of the Planetary Nebula He2-113. E. Lagadec, O. Chesneau, M. Matsuura, O. de Marco, J.A. de Freitas Pacheco, A.A. Zijlstra, A. Acker and C.G. Clayton, in Planetary Nebulae as Astronomical Tools - AIP Conference Proceedings, vol 804, p. 210, 2005. See also, SF2A-2005 - Conference Series - Eds. F. Casoli, T. Contini, J.M. Hameury and L. Pagani - EdP Sciences, p. 341.
66. Phase-Space Mixing of Dark Halos in Merger Events. S. Peirani, F. Durier and J.A. de Freitas Pacheco. SF2A-2006 - Conference Series - eds. D. Barret, F. Casoli, G. Lagache, A. Lecavelier and L. Pagani, p. 297.
67. Effects of the Dark Energy and the Hubble Constant. S. Peirani and J.A. de Freitas Pacheco. SF2A-2006 - Conference Series - eds. D. Barret, F. Casoli, G. Lagache, A. Lecavelier and L. Pagani, p. 293.
68. Quark Core Formation in Spinning-Down Pulsars. G.F. Marranghello, T. Regimbau and J.A. de Freitas Pacheco, Proceedings of the 2nd International Workshop on Astronomy and Relativistic Astrophysics - Intern.J.Mod.Phys. D16, 313, 2007 (special issue).
69. Capture of Compact Objects by Supermassive Black Holes. C. Filloux, J.A. de Freitas Pacheco and T. Regimbau. Journal of Physics, Conf. Ser. 66, 012051, 2007

## 11 Outras Publicações

1. Distribution of Trapped Particles at an Altitude of 900 km near the South Atlantic Geomagnetic Anomaly. Naval Research Laboratory - NRL report 6995, 1970. P. Kaufmann, J.A. de Freitas Pacheco, J.P. Sudano and R.W. Kreplin
2. Galactic Evolution and Nucleosynthesis. Proc. Braz. Symp. on Relativistic Astrophysics - eds. E. Scalise - SAB 1976, p.29 (texto em português)
3. Compact Configurations in the Universe. 28th Annual Meeting of the Braz.Soc.Prog.Sci. - 1976, p.93 (texto em português)
4. Photometry and a Preliminary Analysis of the Beta-Lyrae like System HD173198. IBVS 1306, July 1977. J.A. de Freitas Pacheco, C. Ritté and A. Damineli
5. Binary X-Ray Sources (Rev.Paper). In "Close Binary Systems" - eds. R.V. Moraes and J.A. de Freitas Pacheco - SAB 1978, p.10
6. The Binary System HD173198. In "Close Binary Systems" - eds. R.V. Moraes and J.A. de Freitas Pacheco - SAB 1978, p.87
7. The Shell Ejected by Nova Ser 1978. In "Phenomena of Mass Ejection". ed. J.A.de Freitas Pacheco - SAB 1980, p.113
8. Mass Loss from OB Stars (Rev.Paper). In "Phenomena of Mass Ejection". ed. J.A.de Freitas Pacheco - SAB 1980, p.59
9. Supermassive Black Holes. In 2nd Brazilian School of Gravitation and Cosmology. Ed. Mario Novello - CBPF 1980, p.91
10. Supernova 1897A in the LMC. IAU Circ.4361,1987

11. Nucleosynthesis in Advanced Stages of Stellar Evolution. In "13th Brazilian Meeting on Nuclear Physics" - ed.P.R. Pascholati - SBF 1990, p.217
12. Statistical Model for the Pulsar Population and its Consequences for VIRGO. T. Regimbau and J.A. de Freitas Pacheco. VIRNOT-OCA-1390-163
13. Cosmic background of Gravitational Waves from Rotating Neutron Stars: modes r and bar. T. Regimbau and J.A. de Freitas Pacheco. LIGO-P020023-00-R
14. Phase-Space Evolution of Dark Matter Halos. S. Peirani and J.A. de Freitas Pacheco. astro-ph/071292
15. Comments on Accretion of Phantom Fields by Black Holes and the Generalized Second Law - astro-ph/0808.1863

## 12 Artigos de Divulgação

1. "Vento Solar e Ventos Estelares". Ciência Hoje, 1, 54
2. "As Galáxias". Ciência Hoje na Escola , edição 1996, pag. 6
3. "A Teoria do Big-Bang e o Deutério Interestelar". Ciência Hoje, 2, 22
4. "Estamos Descobrindo Efeitos Antigravitacionais?" Ciência Hoje, 3, 20
5. "A Matéria do Universo". Ciência Hoje, 13, 8
6. "Estamos Sozinhos no Universo?" Ciência Hoje, 22, 38, 1997
7. "O fim dos dinossauros". Ciência Hoje, abril 2009