

Curriculum Vitae

J.A. de Freitas Pacheco

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1 Informações pessoais

Nom: **de Freitas Pacheco, José Antonio**

Data e local de nascimento: 14 de Dezembro de 1942 em S. Paulo (Brasil)

Endereço profissional:

Observatoire de la Côte d'Azur

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2 Títulos Universitários

Bacharel em Física - Universidade de S.Paulo - 1965

Docteur es Sciences Physiques - Université de Nice - 1971

Professor Adjunto - Universidade de S.Paulo - 1977

Professor Titular - Universidade de S.Paulo - 1985

Astrônomo Titular - "Comité National des Astronomes et des Physiciens" (CNAP) - 1995

Professor Emérito - Observatoire de la Côte d'Azur - 2010

3 Funções Acadêmicas

Chefe do Departamento de Astronomia - Universidade de S. Paulo - 1973/1976

Presidente da Comissão de Pós-Graduação do IAGUSP - 1973/1977 and 1987/1989

Presidente de la Sociedade Astronômica Brasileira (SAB) 1974 (primeiro presidente e sócio fundador) e 1978/1982

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

Diretor do Observatório Nacional (Rio de Janeiro) - 1979/1981

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

Presidente da Comissão de Pós-Graduação do Observatório Nacional - 1981/1986

Diretor do Instituto de Astronomia, Geofísica e Ciências Atmosféricas (IAG) da Universidade de S.Paulo - 1989/1993

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

4 Comissões Acadêmicas

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

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

Membro do Comitê de Física e Astronomia - CNPq - 1983/1984

Membro do Conselho Universitário da Universidade de S.Paulo - 1989/1993

Membro da Comissão Jurídica da Universidade de S.Paulo - 1989/1993

Membro da Comissão de Colaboração Internacional da Universidade de S.Paulo - 1989/1993

Membro do Conselho Deliberativo do CNPq - 1990/1992

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

Membro do Conselho Científico do Laboratório Geoscience Azur da Universidade de Nice-Sophia Antípolis - 1997/1999

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

Membro do Conselho Regional da Valorização Científica e Tecnológica da Região PACA - 1996/2006

Membro do "Advisory Committee of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (RECTEALC) of the United Nations" - 2005/2007

5 Honrarias e Distinções

Membro Titular da Academia Brasileira de Ciências

Membro Titular da Academia de Ciências do Estado de S.Paulo

Membro da União Astronômica Internacional (UAI)

Medalha do Observatório de Pulkovo por serviços prestados a colaboração Brasil-URSS, 1973

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

Medalha do Mérito Científico - Grau de Comendador - Governo Brasileiro - 1995

Grande-Cruz do Mérito Científico - Governo Brasileiro - 2000

Medalha de Prata do Departamento de Astronomia do IAGUSP pelos serviços prestados, 2003

Medalha de Prata do Instituto Astronômico e Geofísico da USP pelos serviços prestados a Pós-Graduação, 2006

Medalha do Observatório Nacional pelos serviços prestados à instituição, 2012

Medalha de Ouro do Instituto Astronômico e Geofísico da USP pelos serviços prestados, 2012

6 Teses de Mestrado Orientadas

1. Luiz Arakaki - "Evolução do Disco Galáctico e dos Elementos Leves" - Instituto Tecnológico de Aeronáutica - 1972
2. José R. Bonilha - "Propagação de Ondas em Plasmas Relativísticos" - Universidade de S.Paulo - 1973
3. Ronaldo E. Souza - "Evolução de Regiões HII Fósseis" - Universidade Federal de Minas Geraes - 1973
4. Joel C.C. Filho - "A Produção de Elementos Leves no Meio Interestelar" - Universidade de S.Paulo - 1974
5. Maria F. Nave - "Modelos para a Radiação-X Difusa" - Universidade de S.Paulo - 1974
6. João E. Steiner - "Um Modelo para Cygnus X-1" - Universidade de S.Paulo - 1975
7. Augusto Damineli Neto - "A Fonte Binária Her X-1" - Universidade de S.Paulo - 1976
8. Laerte S. Junior - "Massas de Fontes de Raios-X Binárias" - Universidade de S.Paulo - 1976
9. Francisco Jablonsky - "Um Estudo sobre Variáveis Cataclísmicas" - Universidade de S.Paulo - 1981
10. Lilian Viadana - "Perda de Massa por Estrelas Centrais de Nebulosas Planetárias" - Observatório Nacional - 1983
11. Sandra dos Anjos - "Alguns Problemas Relacionados com a Evolução de Aglomerados de Galáxias" - Universidade de S.Paulo - 1984
12. Telma C.C. da Silva - "Efeitos do Ambiente na Morfologia de Galáxias" - Observatório Nacional - 1986
13. Selma Junqueira - "Dinâmica de Galáxias Binárias" - Observatório Nacional - 1986
14. Miguel A. Gaya - "Um Modelo para a Emissão Infravermelha de NGC 7027" - Universidade de S.Paulo - 1986
15. Vania P. Bichara - "Um Modelo Eruptivo para Cen A" - Observatório Nacional - 1987
16. Maria A. Machado - "Abundância do Carbono em Estelas WC" - Observatório Nacional - 1988
17. Oswaldo D. Miranda - "Ventos Galácticos e a Emissão-X de Galáxias Elípticas" - Universidade de S.Paulo - 1992
18. Márcio Catelan - "Modelos de Síntese para a Morfologia do Ramo Horizontal de Aglomerados Globulares" - Universidade de S.Paulo - 1992
19. Tania Regimbau - "Les Pulsars: Etude Statistique et Modelisation" - Mémoire de DEA - Université de Nice-Sophia Antipolis - 1998
20. Enrica Fornero - "Effeti del Vento Gallattico Sull'Evoluzione Chimica delle Galassie Ellittiche" - Tesi di Laurea - Università degli Studi di Torino - 1998
21. Julien Frémaux - "Evolution de Restes de Supernovae: l'influence du milieu interstellaire" - Mémoire de DEA - Université de Nice-Sophia Antipolis - 2002
22. Stéphane Vincent - "Formation de Systèmes Doubles d'Etoiles á Neutrons" - Mémoire de DEA - Université de Nice-Sophia Antipolis - 2002
23. Sébastien Peirani - "Recherche de Supernovae Proches" - Mémoire de DEA - Université de Nice-

Sophia Antipolis - 2002

24. Fabrice Durier - "Accrétion versus Fusion dans un Univers Dominé par la Matière Noire - Mémoire de DEA - Université de Nice-Sophia Antipolis - 2002

25. David Gherson - "Croissance de Semences des Trous Noirs Primordiaux" - Mémoire de DEA - Université de Lyon - 2004

26. Nicolas Juan - "Croissance Non-Adiabatique de Trous Noirs Supermassifs" - Mémoire de DEA - Université de Nice-Sophia Antipolis - 2004

27. Charline Filloux - "Processus de Croissance des Trous Noirs" - Mémoire Master - Université de Nice-Sophia Antipolis - 2005

28. Alain de Roany - "Création de matière et l'accélération de l'univers - Mémoire de Master - Université de Nice-Sophia Antipolis - 2010

29. Nicolas Fayard - "Taux cosmique de formation des supernovae de type Ia" - Université de Nice, Observatoire de la Côte d'Azur - 2012

7 Teses de Doutorado Orientadas

1. Sayd J. Codina - "Formação de Grãos Interestelares" - Universidade de S.Paulo - 1977 (orientação formal)

2. João E. Steiner - "Discos de Acresção em Estelas Compactas" - Universidade de S.Paulo - 1979

3. Ronaldo E. de Souza - "Efeitos do Ambiente em Grupos e Aglomerados de Galáxias" - 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. Maria Lúcia Q. Tancetti - "Evolução de Populações Estelares de Tipo II" - Universidade de S. Paulo - 1987

6. Augusto Damineli Neto - "Matéria Circunstelar em Estrelas Be" - Universidade de S.Paulo - 1988

7. Vladimyr G. Ortega - "Modelos Hidrodinâmicos para Galáxias Elípticas" - Observatório Nacional - 1989

8. Dalton F. Lopes - "Estelas Peculiares de Alta Luminosidade" - Observatório Nacional - 1989

9. Francisco X. de Araújo - "Ventos Radiativos Axi-simétricos" - Observatório Nacional - 1990

10. Ruth Bruno - "Uma Nova Determinação do Parâmetro de Densidade" - Observatório Nacional - 1992

11. Walter F. Velloso - "Uma Contribuição ao Projeto VIRGO" - Universidade de S.Paulo - 1992

12. Selma Junqueira - "Efeitos de Maré em Galáxias Binárias" - Observatório Nacional - 1993

13. Airton C. Borges - "Evolução Espectral de Galáxias Elípticas" - Universidade de S.Paulo - 1993

14. Roberto D.D. Costa - "Abundâncias Químicas em Nebulosas Planetárias e em Sistemas Simbióticos" - Universidade de S.Paulo - 1993

15. Thais P. Idiart - "Calibração de Índices de Metalicidade: aplicação ao bojo galáctico e bojos de

espirais” - Universidade de S.Paulo - 1995

16. Márcio Catèlan - ”Estudos Evolucionários de Populações II: o ramo horizontal” - Universidade de S.Paulo - 1996

17. Tania Regimbau - ”Etoiles á Neutrons et Ondes Gravitationnelles” - Université de Nice - Sophia Antipolis - 2001

18. Éric Lagadec - ”Apport des Observations Infrarouges pour l’Étude de la Perte de Masse des Étoiles Évoluées” - Université de Nice-Sophia Antipolis - 2005 (co-direction avec D. Mekarnia).

19. Sébastien Peirani - ”Aspects Dynamiques et Physiques de la Matière Noire” - Université de Nice-Sophia Antipolis - 2005

20. Stéphane Vincent - ”Fréquences d’Oscillation des Modes Axisymétriques des Étoiles à Neutrons” - Université de Nice-Sophia Antipolis - 2008 n 21. Fabrice Durier - ”Formation et Evolution des Galaxies: Propriétés Photométriques, Dynamiques et Chimiques” - Université de Nice-Sophia Antipolis - 2009

22. Charline Filloux - ”Evolution des Trous Noirs Supermassifs Présents au Coeur des Galaxies” - Université de Nice-Sophia Antipolis - 2009

23. Matias Montesinos Armijo - ”Accretion Disks and The Origin of Supermassive Black Holes” - Université de Nice-Sophia Antipolis - 2011

8 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. J.A. de Freitas Pacheco and F. LeGuet. A&A 23, 337, 1973

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. J.A. de Freitas Pacheco,

- J.E.Steiner and G.R.Quast. *A&A* 33, 131, 1974
15. Photoelectric Observations of 2U0900-40. J.A. de Freitas Pacheco and G.R.Quast. *A&A* 35, 301, 1974
 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. J.A.de Freitas Pacheco and J.E.Steiner. *Astrophys.Sp.Sci.* 39, 487, 1976
 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 Suppl.* 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. *Ap.J.* 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. *Ap.J.* 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. *Ap.J.* 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 Araujo
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. *Ap.J.* 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 Araujo and M. Cattani
74. Type I Planetary Nebulae in the LMC: Oxygen, Sulphur and Argon Abundance 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. Araujo, 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 Araujo, 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.Thevenin
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
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