

Publicações CAAUL 2007-2009

Peer-reviewed articles

1-Origin and Evolution of Stars and Planets

1- "Molecular gas and a new young stellar cluster in the far outer Galaxy", Yun, J. L., Elia, D., Palmeirim, P. M., Gomes, J. I. & Martins, A. E., *Astronomy & Astrophysics*, **500**, 833 (2009).

2-"Lithium abundances in exoplanet-host stars: modeling", Castro, M.; Vauclair, S.; Richard, O.; Santos, N. C., *A&A*, 494, 663 (2009).

3- "TandEM - Titan and Enceladus Mission", Coustenis et al., *Experimental Astronomy* **23**, p. 893-946, DOI 10.1007/s10686-008-9103-z; (2009)

4- "A young double stellar cluster in an HII region, emerging from its parent molecular cloud". Yun, J. L., Djupvik, A. A., Delgado, A. J. & Alfaro, E. J., *Astronomy & Astrophysics*, **483**, 209 (2008).

5- "Improved Cosmological Constraints from New, Old, and Combined Supernova Data Sets", Kowalski et al., *Astrophysical Journal*, 686, 749 (2008).

6-"Improved cosmological constraints from new, old and combined supernova datasets". Kowalski et al. , *Astrophysical Journal*, **686**, 749 (2008).

7-"An automated method for tracking clouds in planetary atmospheres", Luz D., Berry, D. and Roos-Serote, *New Astronomy*, **13**, p. 224-232 (2008).

8-"Variable winds on Venus mapped in three dimensions", A. Sánchez-Lavega, R. Hueso, G. Piccioni, P. Drossart, J. Peralta, S. Pérez-Hoyos, C. F. Wilson, F. W. Taylor, K. H. Baines, D. Luz, S. Erard, and S. Lebonnois, *Geophysical Research Letters*, 35, L13204 (2008).

9- "New constraints from the Ha line for the temperature of the transiting planet host star OGLE-TR-10", Ammler-von Eiff, M., & Santos, N.C. *Astronomische Nachrichten* **329**, 573 (2008).

10-"Applicability of colour index calibrations to T Tauri stars", Ammler, M., & Schöning, T. *Astronomische Nachrichten*, **329**, 26 (2008).

11- "Pre-main sequence stars in open clusters I. The DAY-I catalogue". Delgado, A. J., Alfaro, E. J., & Yun, J. L., *Astronomy & Astrophysics*, **467**, 1397 (2007).

12-"A diamond-ring star: the unusual morphology of a young (multiple?) object". Yun, J. L., Torrelles, J. M., & Santos, N. C., *Astronomy & Astrophysics*, **340**, 235 (2007).

13- "A new young stellar cluster embedded in a molecular cloud in the far outer Galaxy". Yun, J. L., Lopez-Sepulcre, A. & Torrelles, J. M., *Astronomy & Astrophysics*, **471**, 573 (2007).

14-"A dynamic upper atmosphere of Venus as revealed by VIRTIS on Venus Express", Drossart P., Piccioni G. et al., *Nature*, **450**, p. 641-645 (2007)

15-“South-polar features on Venus similar to those near the north pole”, Piccioni G., Drossart, P. et al., *Nature*, **450**, p. 637-640 (2007)

16-“Scientific goals for the observation of Venus by VIRTIS on ESA/Venus Express mission”, Drossart P., Piccioni G. et al., *Planetary and Space Science*, **55**, p. 1653-1672 (2007)

2-Galaxies and evolution of the Universe

17-“The lack of large compact symmetric objects”; **Augusto, P.**, *Astronomische Nachrichten*, vol.2-3, p.190-192 (2009).

18-“Einstein in Portugal. Eddington's expedition to Principe and the reactions of Portuguese astronomers (1917-1925)”, Elsa Mota, **Paulo Crawford**, Ana Simões, *British Journal of History of Science (BJHS)*, **42**(2): 245–273, (2009).

19-“Interior of a Schwarzschild black hole revisited”, Rosa Doran, Francisco S. N. Lobo, **Paulo Crawford**, *Found. Phys.*, (2008) **38**:160-187, gr-qc/0609042.

20-“Exact solutions of $f(R)$ gravity coupled to nonlinear electrodynamics”, L. Hollenstein and **F. S. N. Lobo**, *Phys. Rev. D* **78**, 124007 (2008) [arXiv:0807.2325 [gr-qc]]

21-“Phantom stars and topology change”, A. DeBenedictis, R. Garattini and **F. S. N. Lobo**, *Phys. Rev. D* **78**, 104003 (2008) [arXiv:0808.0839 [gr-qc]].

22-“Electromagnetic signatures of thin accretion disks in wormhole geometries”, T. Harko, Z. Kovacs and **F. S. N. Lobo**, *Phys. Rev. D* **78**, 084005 (2008) [arXiv:0808.3306 [gr-qc]]

23-“Non-minimum coupling of perfect fluids to curvature”, O. Bertolami, **F. S. N. Lobo** and J. Paramos, *Phys. Rev. D* **78**, 064036 (2008) [arXiv:0806.4434 [gr-qc]]

24-“Quark-Hadron Phase Transitions in Brane-World Cosmologies”, G. De Risi, T. Harko, **F. S. N. Lobo** and C. S. J. Pun, *Nuclear Physics B* **805** 190-206 (2008) [arXiv:0807.3066 [gr-qc]]

25-“Plane symmetric thin-shell wormholes: solutions and stability”, J. P. S. Lemos and **F. S. N. Lobo**, *Phys. Rev. D* **78**, 044030 (2008) [arXiv:0806.4459 [gr-qc]]

26-“General class of wormhole geometries in conformal Weyl gravity”, **F. S. N. Lobo**, *Class. Quant. Grav.* **25**, 175006 (2008) [arXiv:0801.4401 [gr-qc]]

27-“Solar system tests of brane world models”, C. G. Boehmer, T. Harko and **F. S. N. Lobo**, *Class. Quant. Grav.* **25**, 045015 (2008)

28-“Wormhole geometries with conformal motions”, C. G. Boehmer, T. Harko and **F. S. N. Lobo**, *Class. Quant. Grav.* **25**, 075016 (2008)

29-“Generalized virial theorem in $f(R)$ gravity”, C. G. Boehmer, T. Harko and **F. S. N. Lobo**, *JCAP* 0803, 024 (2008)

30-“Dark matter as a geometric effect in $f(R)$ gravity”, C. G. Boehmer, T. Harko and **F. S. N. Lobo**, *Astropart. Phys.* **29**, 386 (2008)

31-"A new two-sphere singularity in general relativity", C. G. Boehmer and **F. S. N. Lobo**, *Int. J. Mod. Phys. D* **17**, 897 (2008) [arXiv:gr-qc/0703024]

32-"The PHOENIX Deep Survey: Extremely Red Galaxies and Cluster Candidates". Smith, A. G., Hopkins, A. M., Hunstead, R. W., Schmidt, S. J., **Afonso, J.**, Georgakakis, A. E., Cram, L. E., Mobasher, B., & Sullivan, M. *Astronomical Journal*, **136**, 358 (2008)

33-"Evidence that FeLoBALs May Signify the Transition between an Ultraluminous Infrared Galaxy and a Quasar", Farrah, D., Lacy, M., Priddey, R., Borys, C., & **Afonso, J.**, *Astrophysical Journal*, **662**, 59 (2007)

34-"Radio observations of the Chandra Deep Field South. Exploring the possible link between radio emission and star formation in X-ray selected AGN", Rovilos, E., Georgakakis, A., Georgantopoulos, I., **Afonso, J.**, Koekemoer, A. M., Mobasher, B., & Goudis, C. *Astronomy & Astrophysics*, **466**, 119 (2007)

35-"The evolution of radio galaxies: their infancy"; **Augusto, P.**, *ASP Conf. Ser.*, vol380, p.261-264; eds: Afonso, J., Ferguson, H.C., Mobasher, B., Norris, R. (2007).

36-"Supporting theory of a new magnetic separator and classifier. Equations and modeling: Part I – Non-magnetic particles"; Augusto, P.A., Castelo-Grande, T., **Augusto, P.**, Barbosa, D., Estévez, A.M.; *Current Applied Physics (IF 1.526; 1.466 – 5 anos)*, vol. 7, p.240-246 (2007).

37-"Supporting theory of a new magnetic separator and classifier. Equations and modeling: Part II – Magnetic particles"; Augusto, P.A., Castelo-Grande, T., **Augusto, P.**, Barbosa, D., Estévez, A.M.; *Current Applied Physics*, vol. 7, p.247-257 (2007).

38-"Supporting theory of a new magnetic separator and classifier. Limiting conditions: Part I – Non-magnetic particles"; Augusto, P.A., Castelo-Grande, T., **Augusto, P.**, Barbosa, D., Estévez, A.M.; *Current Applied Physics*, vol. 7, p.258-263 (2007).

39-"Supporting theory of a new magnetic separator and classifier. Limiting conditions: Part II – Magnetic particles"; Augusto, P.A., Castelo-Grande, T., **Augusto, P.**, Barbosa, D., Estévez, A.M.; *Current Applied Physics*, vol. 7, p.264-273 (2007).

Other publications (Books, Book Sections, papers in peer-reviewed conference)

40-"Wide sub-stellar companions - Something of a rarity also around Ursa Major group members?". **Ammler-von Eiff, M.**, Bedalov, A., Mugrauer, M., Neuhäuser, R., & Guenther, E.W. COOL STARS, STELLAR SYSTEMS AND THE SUN: Proceedings of the 15th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, St. Andrews (Scotland), 21–25 July 2008 AIP conference proceedings, 1094, 828 (2009).

41-"A Somewhat Lower Frequency View of the Chandra Deep Field South", **Jose Afonso**, Proceedings of Panoramic Radio Astronomy: Wide-field 1-2 GHz research on galaxy evolution. June 2-5 2009. Groningen, the Netherlands. Published online at (2009)

- 42-“Portuguese Astronomers and Principle of Relativity”, **Paulo Crawford**, Ana Simões, History of Astronomy in Portugal, Museu da Ciência, Lisboa, 2009.
- 43-“Einstein’s ‘Zurich Notebook’ and the Genesis of General Relativity”, **Paulo Crawford**, Conferência "Mira Fernandes e a sua época", I.S.T, Junho de 2009.
- 44-"The Astronomical Observatory of Lisbon: It's Patrimonial, Social and Scientific Heritage", 2008, **Rui J. Agostinho**, José G. Jorge, Pedro Abreu, et al., Editor Stanislaw Waltos, in Opuscula Musealia, vol. 16, ISBN: 978-83-233-2579-6
- 45-“Measuring Winds in Titan's Atmosphere with High-precision Doppler Velocimetry”, **Luz D.** and Courtin, R., in Precision Spectroscopy in Astrophysics, Proceedings of the ESO/Lisbon/Aveiro Conference held in Aveiro, Portugal, 11-15 September 2006, Santos, N.C.; Pasquini, L.; Correia, A.C.M.; Romaniello, M. (Eds.), ESO Astrophysics Symposia (2008)
- 46-“The dark side of gravity: Modified theories of gravity”, **F. S. N. Lobo**, Invited chapter to appear in an edited collection ‘Dark Energy—Current Advances and Ideas’, Research Signpost Publishers (2008)
- 47 -“Exotic solutions in General Relativity: Traversable wormholes and ‘warp drive’ spacetimes”, **F. S. N. Lobo**, Classical and Quantum Gravity Research, 1-78, Nova Sci. Pub. ISBN 978-1-60456-366-5 (2008)
- 48-“Nature of time and causality in Physics”, **F. S. N. Lobo**, Psychology of Time, 395-422, Emerald,ISBN 978-0-08046-977-5 (2008)
- 49-“Where are the large compact-symmetric objects?”, **Augusto, P.**; *Proceedings of Science*, PoS (MRU) 083 (2008).
- 50-*At the Edge of the Universe: Latest Results from the Deepest Astronomical Surveys*, ASP Conference Series, Vol. 380, proceedings of the conference held 9-13 October, 2006 at Sintra, Portugal. Edited by **Jose Afonso**, Henry C. Ferguson, Bahram Mobasher, and Ray Norris. (2007)