

CAAUL 2010 - Publications

Refereed international articles

Characterization of Titan's Ontario Lacus region from Cassini/VIMS observations, M. L. Moriconi, J. I. Lunine, A. Adriani, E. D'Aversa, A. Negrão, G. Filacchione, A. Coradini, Icarus, Volume 210, Issue 2, p. 823-831 (2010).

A tropical haze band in Titan's stratosphere, R. de Kok, P. G. J. Irwin, N. A. Teanby, S. Vinatier, F. Tosi, A. Negrão, S. Osprey, A. Adriani, M. L. Moriconi, A. Coradini, Icarus, Volume 207, Issue 1, p. 485-490 (2010).

Cassini VIMS and RADAR Teams, Correlations between VIMS and RADAR data over the surface of Titan: Implications for Titan's surface properties, F. Tosi, R. Orosei, R. Seu, A. Coradini, J. I. Lunine, G. Filacchione, A. I. Gavrishin, F. Capaccioni, P. Cerroni, A. Adriani, M. L. Moriconi, A. Negrão, E. Flamini, R. H. Brown, L. C. Wye, M. Janssen, R. D. West, J. W. Barnes, S. D. Wall, R. N. Clark, D. P. Cruikshank, T. B. McCord, P. D. Nicholson, J. M. Soderblom, Icarus, Volume 208, Issue 1, p. 366-384 (2010).

Jupiter's hot spots: Quantitative assessment of the retrieval capabilities of future IR spectro-imagers, D. Grassi, A. Adriani, M. L. Moriconi, N. I. Ignatiev, E. D'Aversa, F. Colosimo, A. Negrão, L. Brower, B. M. Dinelli, A. Coradini, G. Piccioni, Planetary and Space Science, Volume 58, Issue 10, p. 1265-1278 (2010).

"Young stellar clusters and associations in M33", Grossi, M., Corbelli, E., Giovanardi, C., Magrini, L., *Astronomy & Astrophysics*, 521, A41, (2010).

"The Herschel Virgo cluster survey: V. Star-forming dwarf galaxies - dust in metal-poor environments", Grossi, M., Hunt, L. K., Madden, S., Vlahakis, C., et al., *Astronomy & Astrophysics*, **518**, L52, (2010).

"The Herschel Virgo Cluster Survey: I. Luminosity functions", Davies, J. I., Baes, M., Bendo, G. J., Bianchi, S., ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L48, (2010).

"The Herschel Virgo Cluster Survey: II. Truncated dust disks in HI-deficient spirals", L. Cortese, J. I. Davies, M. Pohlen, M. Baes, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L49, (2010).

"The Herschel Virgo Cluster Survey: III. A constraint on dust grain lifetime in early-type galaxies", M. S. Clemens, A. P. Jones, A. Bressan, M. Baes, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L50, (2010).

"The Herschel Virgo Cluster Survey: IV. Resolved dust analysis of spiral galaxies", M. W. L. Smith, C. Vlahakis, M. Baes, G. J. Bendo, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L51, (2010).

"The Herschel Virgo Cluster Survey: VI. The far-infrared view of M87", M. Baes, M. Clemens, E. M. Xilouris, J. Fritz, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L53, (2010).

"The Herschel Virgo Cluster Survey: VII. Dust in cluster dwarf elliptical galaxies", I. De Looze, M. Baes, S. Zibetti, J. Fritz, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L54, (2010).

"FIR colours and SEDs of nearby galaxies observed with Herschel", A. Boselli, L. Ciesla, V. Buat, L. Cortese, ..., Grossi, M., .., *Astronomy & Astrophysics*, **518**, L61, (2010).

"A Multi-wavelength Approach to the Properties of Extremely Red Galaxy Populations. I. Contribution to the Star Formation Rate Density and Active Galactic Nucleus Content", Messias, H., Afonso, J., Hopkins, A., Mobasher, B., Dominici, T., Alexander, D. M. *Astrophysical Journal*, **719**, 790 (2010)

"The Extraordinary Mid-infrared Spectral Properties of FeLoBAL Quasars", Farrah, D., Urrutia, T., Lacy, M., Lebouteiller, V., Spoon, H. W. W., Bernard-Salas, J., Connolly, N., Afonso, J., Connolly, B., Houck, J. *Astrophysical Journal*, **717**, 868 (2010)

"The magnetic hyperfine structure in the rotational spectrum of H₂CNH". L. Dore, L. Bizzocchi, C. Degli Esposti, J. Gauss, *J. Mol. Spectrosc.* 263, 44 (2010)

"Submillimetre-wave spectrum of diacetylene and diacetylene-d₂" L. Bizzocchi, C. Degli Esposti, L. Dore, *Mol. Phys.* 108, 2315 (2010)

"Separating expansion from contraction in spherically symmetric models with a perfect-fluid: Generalization of the Tolman-Oppenheimer-Volkoff condition and application to models with a cosmological constant", J. P. Mimoso, M. Le Delliou and F. C. Mena, *Phys. Rev. D* 81, 123514 (2010) [arXiv:0910.5755 [gr-qc]]

"Self-interacting scalar field cosmologies: unified exact solutions and symmetries" T. Charters and J. P. Mimoso *JCAP* 1008, 022 (2010) [arXiv:0909.2282 [hep-ph]]

"Possibility of hyperbolic tunneling" F. S. N. Lobo and J. P. Mimoso *Phys. Rev. D* 82, 044034 (2010) [arXiv:0907.3811 [gr-qc]]

"Solar system tests of Horava-Lifshitz gravity" T. Harko, Z. Kovacs and F. S. N. Lobo *Proceedings of the Royal Society A* (2010), published online 24 Nov. 2010 [arXiv:0908.2874[gr-qc]]

"Stability of the Einstein static universe in IR modified Horava gravity" C. G. Boehmer and F. S. N. Lobo *Eur. Phys. J. C* 70, 1111 (2010) [arXiv:0909.3986 [gr-qc]]

"f(R;Lm) gravity" T. Harko and F. S. N. Lobo *Eur. Phys. J. C* 70, 373 (2010) [arXiv:1008.4193 [gr-qc]]

"Classical tests of general relativity in brane world models" C. G. Boehmer, G. De Risi, T. Harko and F. S. N. Lobo *Class. Quant. Grav.* 27, 185013 (2010) [arXiv:0910.3800 [gr-qc]]

"Thin accretion disk signatures in dynamical Chern-Simons modified gravity" T. Harko, Z. Kovacs and F. S. N. Lobo *Class. Quant. Grav.* 27, 105010 (2010) [arXiv:0909.1267 [gr-qc]]

"Wormhole geometries supported by a nonminimal curvature-matter coupling" N. M. Garcia and F. S. N. Lobo *Phys. Rev. D* 82, 104018 (2010) [arXiv:1007.3040 [gr-qc]]

"General class of vacuum Brans-Dicke wormholes" F. S. N. Lobo and M. A. Oliveira *Phys. Rev. D* 81, 067501 (2010) [arXiv:1001.0995 [gr-qc]]

"Folding of knotted proteins: Insights from lattice simulations" P. F. N. Faísca, R. D. M. Travasso, T. Charters, A. Nunes, M. Cieplak, *Physical Biology* 7, 016009 (2010)

Refereed National articles

"Einstein's 'Zurich Notebook' and the Genesis of General Relativity", Paulo Crawford, *Boletim da Sociedade Portuguesa de Matemática*, número especial dedicado à memória de Aureliano de Mira Fernandes, p. 223-245, 2010.

Non-refereed international articles

Luz, D., Berry, D., Peralta, J., Drossart, P., Piccioni, G. and the Venus Express Team, 2010, South polar dynamics of the venusian atmosphere from VIRTIS/Venus Express mapping in the thermal range, *Geophysical Research Abstracts*, 12, EGU2010-11119;

Luz, D., Berry, D., Peralta, J., Piccioni, G., Drossart, P. and the VIRTIS-Venus Express Team, 2010, Winds and cloud morphology in the southern polar region of Venus, *EPSC Abstracts*, Vol. 5, EPSC2010-670, European Planetary Science Congress;

Luz, D., Berry, D., Peralta, J., Duarte, L., Furtado, A., Drossart, P., Piccioni, G. and the VIRTIS-Venus Express Team, 2010, South polar dynamics of the Venusian atmosphere from VIRTIS/Venus Express mapping in the thermal range, in *International Venus Conference*;

Machado, P., Luz, D., Widemann, T., Lellouch, E., Witasse, O. and Bertaux, J.-L., 2010, Characterizing the Venus atmospheric dynamics from ground-based Doppler velocimetry, *Geophysical Research Abstracts*, 12, EGU2010-9443.

Machado, P., Widemann, T. and **Luz, D.**, 2010, Characterizing the Venus atmospheric dynamics from ground-based Doppler velocimetry, in *International Venus Conference*;

Non-refereed national articles

Representações da Astronomia e do Céu nas Artes Visuais, in “As Imagens com que a Ciência se Faz”, O. Pombo e S. DiMarco Eds., Fim de Século, 2010.