

## JD Mathews

### Publication List – March 2012

#### Papers Submitted and in Review

- Sarkhel, S., S. Raizada, J. D. Mathews, C. A. Tepley, F. J. Rivera, and S. A. Gonzalez, Identification of large scale billow-like structures in the neutral sodium layer over Arecibo, *J. Geophys. Res.*, in review (2012)
- Seker, I., S. F. Fung, and J. D. Mathews, The relation between the E-region gravity waves and the F-region plasma depletion bands observed with an all-sky imager at Arecibo, *J. Geophys. Res.*, in review (2011).

#### Non-Refereed Papers and News Articles

- “Tuning the World into Imaging Radar”, *International Innovation*, in press (March 2012).
- Meisel, D. D., V. S. Getman, J. D. Mathews, Y. T. Morton, Q. Zhou, R. G. Roper, and B. G. Marsden, “An unusual bolide with a near-Earth orbit”, *Bul. American Astron. Soc.*, 26, 1164-1165 (1994).
- Mathews, J. D., "Catching a Meteor in the Act," (News article with two figures) *Sky and Telescope*, 30, #5, 468-469 (Nov. 1990).
- “Inbound Meteor Prompts Scientists To Urge Cataloging Space Objects”, news article by Robert C. Cowen, *Christian Science Monitor*, Page 11 (1 August 1995).

#### Journal Articles and Reviewed Conference Proceedings (112 refereed papers):

- Mathews, J. D., “From here to ET”, *J. British Interplanetary Soc.*, 64 no 6/7, 234-241 (2011).
- Mathews, J. D., “Underdense, overdense, and Bragg scattering in radar meteors”, Proceedings of XXX URSI General Assembly and Scientific Symposium of the International Union of Radio Science, Istanbul, Turkey, 13-20 August, doi: 10.1109/URSIGASS.2011.6050923 (2011).
- Seker, I., W. E. Swartz, J. D. Mathews, and N. Aponte, “A new 3D display format relating azimuth-scanning radar data and all-sky images”, Proceedings of XXX URSI General Assembly and Scientific Symposium of the International Union of Radio Science, Istanbul, Turkey, 13-20 August, doi: 10.1109/URSIGASS.2011.6050983 (2011).
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- Malhotra, A., and J. D. Mathews, “A statistical study of meteoroid fragmentation and differential ablation using the Resolute Bay incoherent scatter radar”, *J. Geophys. Res.*, 116, pp. A04316, doi:10.1029/2010JA016135 (2011).
- Seker, I., S. F. Fung, and J. D. Mathews, “The relation between magnetospheric state parameters and the occurrence of plasma depletion events in the night-time mid-latitude F-region”, *J. Geophys. Res.*, 116, A04323, doi:10.1029/2010JA015521 (2011).
- Djuth, F. T., L. D. Zhang, D. J. Livneh, I. Seker, M. P. Sulzer, J. D. Mathews, and R. L. Walterscheid, “Arecibo's thermospheric gravity waves and the case for an ocean source”, *J. Geophys. Res.*, 115, A08305, doi:10.1029/2009JA014799 (2010).

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- Malhotra, A., and J. D. Mathews, "Low-altitude meteor trail echoes", *Geophys. Res. Lett.*, 36, L21106, doi:10.1029/2009GL040558 (2009).
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### **Special Reports**

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