A lingering local exosphere created by a gas plume of a lunar lander, W. M. Farrell, P. Prem, O. J. Tucker, D. M. Hurley, B. A. Cohen, M. Benna, (2021), Icarus, in press, https://doi.org/10.1016/j.icarus.2021.114857 [NISI]

Volatile interactions with the lunar surface, P. G. Lucey, N. Petro, D. Hurley, W. Farrell, P. Prem, et al. (2021), Geochemistry, in press, https://doi.org/10.1016/j.chemer.2021.125858 [NISI].

Modeling the lunar wake response to a CME using a hybrid-PIC Model, A. P. Rasca, S. Fatemi, W. M. Farrell, (2021), Planetary Sci. J., in press [NISI]

The vector electric field investigation (VEFI) on the C/NOFS satellite, R. Pfaff, P. Uribe, R. Fourre, J. Kujawski, N. Maynard, M. Acuna, D. Rowland, H. Freudenreich, K. Bromund, S. Martin, C. Liebrecht, R. Kramer, F. Hunsaker, R. Holzworth, M. McCarthy, W. Farrell, J. Klenzing, G. Le, A. Jacobson, J. Houser, C. Steigies, and J. J. Berthelier, (2021), Space Sci. Rev., 217:85. [NISI]

Will the Mars helicopter induce local Martian atmospheric breakdown?, W. M. Farrell, J. L. McLain, J. R. Marshall, and A. Wang (2021), Planetary Sci. J., 2, 46. https://doi.org/10.3847/PSJ/abe1c3 [NISI]

Terminator Double Layer Explorer (TerDLE): Examining the Near-Moon Lunar Wake, W. M. Farrell, P. E. Clark, M. R. Collier, et al. (2021), Planetary Sci. J., 2, 61. https://doi.org/10.3847/PSJ/abe0ca [NISI]

Near-Sun switchback boundaries: Dissipation with solar distance, Rasca, A. P., W. M. Farrell, R. J. Macdowall, S. D. Bale, and J. C. Kasper (2021), Ap. J., 916:84, https://doi.org/10.3847/1538-4357/ac079f

Switchback boundary dissipation and relative age, W. M. Farrell, A. P. Rasca, R. J. Macdowall, J. R. Gruesback, S. D. Bale, and J. C. Kasper (2021), Ap. J., 915:68, https://doi.org/10.3847/1538-4357/ac005b

Hydroxylation of Apollo 17 Soil Sample 78421 by Solar Wind Protons, J. L. McLain, M. J. Loeffler, W. M. Farrell, C. I. Honniball, J. W. Keller, and R. Hudson, J. Geophys. Res., 126, e2021JE006845.

Non-detection of lightning during the second Parker Solar Probe Venus gravity assist, M. Pulupa, S. D. Bale, S. M. Curry, W. M. Farrell., K. A. Goodrich, K. Goetz, P. R. Harvey, D. M. Malaspina, and N. E. Raouafi, Geophys. Res. Lett., 48, e2020GL091751.

A double disturbed lunar plasma wake, Rasca, A. P, Fatemi, S., Farrell, W. M, Poppe, A. R, & Zheng, Y. (2021). Journal of Geophysical Research: Space Physics, 126, e2020JA028789. https://doi.org/10.1029/2020JA028789

On the effect of magnetospheric shielding on the lunar hydrogen cycle, Tucker, O. J., Farrell, W. M., & Poppe, A. R. (2021), Journal of Geophysical Research: Planets, 126, e2020JE006552. https://doi.org/10.1029/2020JE006552

The Beam Plasma Interactions Experiment: An Active Experiment Using Pulsed Electron Beams, Reeves GD, Delzanno GL, Fernandes PA, Yakymenko K, Carlsten BE, Lewellen JW, Holloway MA, Nguyen DC, Pfaff RF, Farrell WM, Rowland DE, Samara M, Sanchez ER, Spanswick E, Donovan EF and Ruytershteyn V (2020), Front. Astron. Space Sci., 7,23, doi:10.3389/fspas.2020.00023. [NISI]

Mapping the predicted solar wind hydrogen flux in lunar south polar craters, Rhodes,D. J, and W. M. Farrell (2020), Planetary Sci. J., 1:13, https://doi.org/10.3847/PSJ/ab8939  [NISI]
Amorphization of S, Cl-salts induced by Martian dust activities, A. Wang, Y. Yan, D. M. Dyar, J. L. Houghton, W. M. Farrell, B. L. Jolliff, S. M. McLennan, E. Shi, and H. Qu, J. Geophys. Res. – Planets, 125, e2020JE006701, doi:10.1029/2020KE006701.

Molecular water detected on the sunlit Moon by SOFIA, Honniball, C.I., P. G. Lucey, S. Li, S. Shenoy, T. M. Orlando, C. A. Hibbitts, D. M. Hurley, and W. M. Farrell (2020), Nature Astron., https://doi.org/10.1038/s41550-020-01222-x

Non-detection of radio emissions from Titan lightning by Cassini RPWS. Fischer, G., Farrell, W. M., Gurnett, D. A., & Kurth, W. S. (2020). Journal of Geophysical Research: Planets, 125, e2020JE006496. https://doi.org/10.1029/2020JE006496

Tribocharging and electrical grounding of a drill in shadowed regions of the Moon, Rhodes, D. J., W. M. Farrell, and J. L. McLain (2020), Adv. Space Res., 66, 753-759.

Magnetic field Dropouts at Near-Sun Switchback Boundaries: A Superposed Epoch Analysis, W. M. Farrell, R. J. MacDowall, J. R. Gruesbeck, S. D. Bale, and J. C. Kasper (2020), Astrophys. J. Supplement, 249:28, https://doi.org/10.3847/1538-4365/ab9eba

Chlorine release from common chlorides by Martian dust activity. Wang, A., Yan, Y., Jolliff, B. L., McLennan, S. M., Wang, K., Shi, E., & Farrell, W. M. (2020). Journal of Geophysical Research: Planets, 125, e2019JE006283. https://doi.org/10.1029/2019JE006283

Plasma expansion towards an electrically-insulated surface, D. J. Rhodes and W. M. Farrell (2020), J. Plasma Physics, 86, Article Number 905860204, https://doi.org/10.1017/S0022377820000148

Solar wind and interplanetary magnetic field influence on ultra low frequency waves and reflected ions near the Moon, Howard, S. K., Halekas, J. S., Farrell, W. M., McFadden, J. P., & Glassmeier, K.-H. (2020), Journal of Geophysical Research: Space Physics, 125, e2019JA027209, https://doi.org/10.1029/2019JA027209

2019

Highly structured slow solar wind emerging from an equatorial coronal hole, Bale, S. D., S. T. Badman, J. W. Bonnell, et al. (2019), Nature, 576, 237, DOI:10.1038/s41586-019-1818-7.

The young age of the LAMP-observed frost in lunar polar cold traps. Farrell, W. M., Hurley, D. M., Poston, M. J., Hayne, P. O., Szalay, J. R., & McLain, J. L. (2019), Geophysical Research Letters, 46. https://doi.org/10.1029/2019GL083541

A persistent, large-scale, and ordered electrodynamic connection between Saturn and its main rings. Sulaiman, A. H., Farrell, W. M., Ye, S.-Y., Kurth, W. S., Gurnett, D. A., Hospodarsky, G. B., et al (2019), Geophysical Research Letters, 46. https://doi.org/10.1029/2019GL083541

Steady-state solution of a solar wind-generated electron cloud in a lunar crater. Rhodes D. J., & Farrell, W. M. (2019), Journal of Geophysical Research: Space Physics, 124. https://doi.org/10.1029/2019JA026625

Diurnally migrating lunar water: Evidence from Ultraviolet data, Hendrix, AR, D. M. Hurley, W. M. Farrell, et al., Geophys. Res. Lett., 46, 2417-2424, DOI: 10.1029/2018GL08182

Saturn’s dusty ionosphere, Morooka, MW, J.-E. Wahlund, L. Z. Hadid, A. I. Eriksson, N. J. T. Edberg, E. Vigren, D. J. Andrews, A. M. Persoon, W. S. Kurth, D. A. Gurnett, W. M. Farrell, J. H. Waite, R. S. Perryman, M. Perry, (2019), J. Geophys. Res. - Space Phys., 124, 3, 1679-1697. DOI: 10.1029/2018JA026154
Solar wind implantation into the lunar regolith: Monte Carlo Simulations of H retention in a surface with defects and the H2 exosphere, Tucker, O. J., W. M. Farrell, R. M. Killen, and D. M. Hurley (2019), J. Geophys. Res. – Planets, 124, 278-293, doi:10.1029/2018JE005805

Collecting amino acids in the Enceladus plume, M. Guzman, R. Lorentz, D. Hurley, W. Farrell, J. Spencer, T. Hurford, J. Ibea, P. Carlson and C. P. McKay (2019), International J. Astrobiology, 18, 47-59 https://doi.org/10.1017/S1473550417000054. [NISI]

2018

Regarding electrified dust storms on Mars, W. M. Farrell (2018), p 49-80 in “Dust in the atmosphere of Mars and its impact on human exploration, ed. J. S. Levine, D. Winterhalter, and R. L. Kerschmann, Cambridge Scholars Publishing, Newcastle upon Tyne, UK. [NISI]

Shaking as a means to detach adhered regolith from manned Phobos exploration, Hartzell, C. M., W. Farrell, J. R. Marshall (2018), Advances in Space Res., 62, 2213-2219, http://dx.doi.org/10.1061/j.asr.2017.09.010 [NISI]

Forming perchlorates on Mars through plasma chemistry during dust events, Z. Wu, A. Wang, W. M. Farrell, Y. Yan, K. Wang, J. Houghton, and A. W. Jackson (2018), Earth and Planetary Science Letters, 504, 94-105, https://doi.org/10.1016/j.epsl.2018.08.040

Using proton radiation from the Moon to search for diurnal variation of regolith hydrogenation, Schwadron,, N. A. J. K. Wilson, M. D. Looper, A. Jordan, M. D. Looper, C. Zeitlin, L. W. Townsend, H. E. Spence, J. Legere, P. Bloser, W. M. Farrell, D. Hurley, N. Petro, T. J. Stubbs, C. Pieters (2018), Planetary and Space Science, 162,113-132.

Ring shadowing effects on Saturn’s ionosphere: Implications for ring opacity and plasma transport, L. Z. Hadid, M. W. Morooka, J.-E. Wahlund, L. More, T. E. Craven, M. M. Hedman, N. J. T. Edberg, E. Vigren, J. H. Waite, Jr., R. Perryman, W. S. Kurth, W. M. Farrell, A. I. Eriksson (2018), Geophys. Res. Lett., 45, 10084-10092https://doi.org/10.1029/2018GL079150,

Anticipated electrical environment at Phobos: Nominal and Solar Storm Conditions, Farrell, W. M., J. S. Halekas, S. Fatemi, A. R. Poppe, C. Hartzell, J. R. Marshall, T. J. Stubbs, M. I. Zimmerman, and Y. Zheng (2018), Adv. Space Res., 62, 2199-2212, http://dx.doi.org/10.1061/j.asr.2017.08.009

Exospheric Escape: A Parametric Study, Killen, R. M., W. M. Farrell, and M. H. Burger (2018), Advances in Space Res., 62, 2364-2371, http://dx.doi.org/10.1061/j.asr.2017.06.105.

Saturn’s plasma density depletions along magnetic field lines connected to the main rings, Farrell, W. M., Hadid, L. Z., Morooka, M. W., Kurth, W. S., Wahlund, J.-E., MacDowall, R. J., et al. (2018). Geophysical Research Letters, 45, 8104–8110. https://doi.org/10.1029/2018GL078137 [NISI]

Enceladus auroral hiss emissions during Cassini’s Grand Finale, A. H. Sulaiman, W. S. Kurth, G. B. Hospodarsky, T. F. Averkamp, S-Y., Ye, J. D. Menietti, W. M. Farrell, D. A. Gurnett, A. M. Persoon, M. K. Doughery, G. J. Hunt, Geophys. Res. Lett., 45, 7347-7353.

Auroral Hiss emissions during Cassini’s Grand Finale: Diverse electrodynamic interactions between Saturn and its rings, A. H. Sulaiman, W. S. Kurth, G. B. Hospodarsky, T. F. Averkamp, A. M. Persoon, J. D. Menietti, S-Y., Ye, D. A. Gurnett, D. Pisa, W. M. Farrell, M. K. Doughery, Geophys. Res. Lett., 45, 6782-6798.

Effects of multiscale phase-mixing and interior conductance in the lunar-like pickup ion plasma wake. First results from 3-D hybrid kinetic modeling, A. S. Lipatov, M. Sarantos W. M. Farrell, J. F. Cooper (2018), Planetary Space Sci., 156, 117-129
The dusty plasma disk around the Janus/Epimetheus ring, M. W. Morooka, J. E. Wahlund, D. J. Andrews, A. M. Persoon, S. -Y. Ye, W. S. Kurth, D. A. Gurnett, and W. M. Farrell (2018), J. Geophys. Res. – Space Physics, 123, 4668-4678

Update on the worsening galactic cosmic radiation environment observed by CRaTER and implications for future human deep-space exploration, Schwardon, N. A., F. Rahmanifard, J. Wilson, et al. (2018), Space Weather, 16, 289-303.

Reaction: Chemistry driven by the harsh space environment, Farrell, W. M. (2018), Chem, 4, 12-14

In situ measurements of Saturn’s ionosphere show its dynamic and interacts with the rings, Wahlund J.-E., M. W. Morooka, L. Z. Hadid, A. M. Persoon, W. M. Farrell, D. A. Gurnett, G. Hospodarsky, W. S. Kurth, S.-Y. Ye, D. J. Andrews, N. J. T. Edberg, A. I. Eriksson, and E. Vigren (2018), Science, 359, 66-68, DOI:10.1126/science.aao4134.

Formation timescales of amorphous rims on lunar grains from ARTEMIS observations, Poppe, A. R., W. M. Farrell, J. S. Halekas (2018), J. Geophys. Res.-Planets, 123, 37-46.

2017

Intense harmonic emission observed in Saturn’s ionosphere, Sulaiman A. H., W. S. Kurth, A. M. Persoon, J. D. Menietti, W. M. Farrell, S. Y. Ye, G. B. Hospodarsky, D. A. Gurnett, and L. Z. Hadid (2017), Geophys. Res. Lett., 44, 12049-12056

The Martian dust devil electron avalanche: Laboratory measurements of the E-field fortifying effects of dust-electron absorption, W. M. Farrell, J. L. McLain, M. R. Collier, and J. W. Keller (2017), Icarus, 297, 90-96.

Identifying ultra low frequency waves in the lunar plasma environment using trajectory analysis and resonance conditions, Howard, S. K., J. S. Halekas, W. M. Farrell, J. P. McFadden, K. – H., Glassmeier (2017), J. Geophys. Res. Space Physics, 122, 9983-9993.

Saturn’s rings and associated ring plasma cavity: Evidence for slow ring erosion, W. M. Farrell, W. S. Kurth, D. A. Gurnett, A. M. Persoon, and R. J. MacDowall (2017), Icarus, 292, 48-53, doi:10.1016/j.icarus.2017.03.022

Distribution and solar wind control of compressional solar wind-magnetic anomaly interactions observed at the Moon by ARTEMIS, Halekas, J. S., A. R. Poppe, M. C. Lue, W. M. Farrell and J. P. McFadden (2017), J. Geophys. Res. Space Physics, 122, 6240-6254.

Ion trapping by dust grains: Simulation applications to the Enceladus plume, W. M. Farrell J.-E. Wahlund, M. Morooka, W. S. Kurth, D. A. Gurnett, and R. J. MacDowall (2017), J. Geophys. Res. – Planets,122, 729-743

AMITIS: a 3D GPU-based Hybrid-PIC Model for space and plasma physics, Fatemi, S., A. R. Poppe, G. T. Delory, W. M. Farrell (2017)., J. Physics: Conf. Ser., 837,102017, doi:10/1088/1742-6596/837/1/012017

The statistical mechanics of solar wind hydroxylation at the Moon, within lunar magnetic anomalies and at Phobos, W. M. Farrell, D. M. Hurley, V. J. Esposito, J. L. McLain, and M. I. Zimmerman (2017), J. Geophys. Res. – Planets, 122, 269-289. doi:10.1002/2016JE005168

Stair-step particle flux spectra on the lunar surface: Evidence for nonmonotonic potentials, M. R. Collier, A. Newheart, A. R. Poppe, H. K. Hills, W. M. Farrell (2017), Geophys. Res. Lett., 44, 79-87, doi:10.1002/2016GL071457

2016

The FIELDS Instrument Suite for Solar Probe Plus, S. D. Bale, K. Goetz, P. R. Harvey, P. Turin, J. W. Bonnell, T. Dudok de Wit, R. E. Ergun, R. J. MacDowall, M. Pulupa, M. Andre, J.-L. Bougeret, T. Brown, D. Burgass, C. A.
Applications of electrified dust and dust devil electrodynamics to Martian atmospheric electricity, R. G. Harrison, E. Barth, F. Esposito, J. Merrison, F. Montmessin, K. L. Alpin, C. Borlina, J. J. Berthelier, G. Deprez, W. M. Farrell, I. M. P. Houghton, N. O. Renno, K. A. Nicoll, S. N. Tripathi, M. I. Zimmerman (2016), Space Sci. Rev., 203, 299-345, DOI 10.1007/s11214-016-0241-8.

Tethered lunar subsatellites for multi-point and low altitude measurements, M. R. Collier, R. R. Vondrak, R. P. Hoyt, M. A. Mesarch, W. M. Farrell, J. W. Keller, P. E. Clark, N. E. Petro, and K.-J. Hwang (2016), Acta Astronautica, 128, 464-472

The Gas-Surface Interaction of a Human Occupied Spacecraft with a Near Earth Object, W. M. Farrell, D. H. Hurley, M. J. Poston, M. I. Zimmerman, T. M. Orlando, C. A. Hibbitts, and R. M. Killen (2016), Adv. Space Res., 58, 1648-1653

Grain-scale supercharging and breakdown on airless regolith, Zimmerman, M. I., W. M. Farrell, C. M. Hartzell (2016), J. Geophys. Res. Planets, 121, 2150-2165

Signature of volatiles in the lunar proton albedo, N. A. Schwadron, J. K. Wilson, M. D. Looper, A. Jordan, H. E. Spence, J. B. Blake, A. W. Case, Y. Iwata, J. Kasper, W.M. Farrell, D. J. Lawrence, G. Livaditis, et al. (2016), Icarus, 273, 25-35.

Structure and composition of the distant lunar exosphere: Constraints from ARTEMIS observations of ion acceleration in time-varying fields, J. S. Halekas, A. R. Poppe, W. M. Farrell, and J. P. McFadden (2016), J. Geophys. Res., 121, 1102-1115.

Electric fields generation in Martian dust devils, E. L. Barth, W. M. Farrell., S. C. R. Rafkin (2016), Icarus, 268, 253-265.

2015

The electrostatic plasma environment of a small airless body under non-aligned plasma flow and UV conditions, Poppe, A. R., M. I. Zimmerman, J. S. Halekas, and W. M. Farrell, (2015), Planetary Space Sci., 119, 111-120.

Kinetic Simulations of Micro-Magnetosphere Formation on the Moon, Zimmerman, M. I., W. M. Farrell, A. R. Poppe (2015), J. Geophys Res. Planets, 120, 1893-1903.

Plasma regions, charged dust, and field-aligned currents near Enceladus, I. A. D. Engelhardt, J.- E. Wahlund, D. J. Andrews, A. I. Eriksson, S. Ye, W. S. Kurth, D. A. Gurnett, M. W. Morooka, W. M. Farrell, M. K. Dougherty (2015), Planetary. Space Sci., 117, 453-469.

On the confinement of lunar induced magnetic fields, Fatemi, S., H. Fuqua1, A. R. Poppe, G. T. Delory, J. S. Halekas, W. M. Farrell and M. Holmstrom (2015), Geophys. Res. Lett., 42, DOI:10.1002/2015GL065576.

Solar wind Implantation into Lunar Regolith: Hydrogen Retention in a surface with Defects, W. M. Farrell, D. M. Hurley, M. I. Zimmerman (2015), Icarus, 255, 116-126.

Is the electron avalanche process in a Martian dust devil self-quenching?, W. M. Farrell J. L. McLain, M. R. Collier, J. W. Keller, T. J. Jackson, and G. T. Delory (2015), Icarus, 254, 333-337.

Spillage of lunar polar crater volatiles onto adjacent terrains: The case for dynamic processes, W. M. Farrell, D. M. Hurley, and M. I. Zimmerman (2015), Geophys. Res. Lett., 42, 3160-3165
Rover wheel charging on the lunar surface, T. L. Jackson, W. M. Farrell, M. I. Zimmerman (2015), Advances in Space Research, 55, 1710-1720.

2014

An Estimate of the Dust Pickup Current at Enceladus, W. M. Farrell, J.-E. Wahlund, M. Morooka, D. A. Gurnett, W. S. Kurth, and R. J. MacDowall (2014), Icarus, 239, 217-221.

Grid-free plasma simulations of the complex interactions between the solar wind and small, near-Earth asteroids, Zimmerman, M. I., W. M. Farrell, and A. R. Poppe (2014), Icarus, 238, 77-85.

On lunar exospheric column densities and solar wind access beyond the terminator from ROSAT soft x-ray observations of solar wind charge exchange, Collier, M. C., et al. (2014), J. Geophys. Res., 119, 1459-1479.

Analytical model for gyro-phase drift arising from abrupt inhomogeneity, J. J. Walker, M. E. Koepke, M. I. Zimmerman, W. M. Farrell and V. I. Demidov (2014), Journal of Plasma Physics, 80, 395-404.

Dependence of lunar surface charging on solar wind plasma conditions and solar irradiation By: Stubbs, T. J.; Farrell, W. M.; Halekas, J. S.; et al. PLANETARY AND SPACE SCIENCE Volume: 90 Pages: 10-27 Published: JAN 2014

2013

Signature of gyro-phase drift By: Koepke, Mark E.; Walker, J. J.; Zimmerman, M. I.; et al., JOURNAL OF PLASMA PHYSICS Volume: 79 Pages: 1099-1105 Part: 6 Published: DEC 2013

Redistribution of lunar polar water to mid-latitudes and its role in forming an OH veneer By: Farrell, W. M.; Hurley, D. M.; Hodges, R. R.; et al. PLANETARY AND SPACE SCIENCE Volume: 89 Pages: 15-20 Published: DEC 2013

Observations of narrowband ion cyclotron waves on the surface of the Moon in the terrestrial magnetotail By: Chi, P. J.; Russell, C. T.; Wei, H. Y.; PLANETARY AND SPACE SCIENCE Volume: 89 Pages: 21-28 Published: DEC 2013

Recursive plasma wake formation on the Moon and its effect on polar volatiles, Zimmerman, M. I.; Farrell, W. M.; Stubbs, T. J, ICARUS Volume: 226 Issue: 1 Pages: 992-998 Published: SEP-OCT 2013

The lunar dust pendulum Author(s): Collier, Michael R.; Farrell, William M.; Stubbs, Timothy J. Source: ADVANCES IN SPACE RESEARCH Volume: 52 Issue: 2 Pages: 251-261 DOI: 10.1016/j.asr.2012.09.044 Published: JUL 15 2013

The lunar photoelectron sheath: A change in trapping efficiency during a solar storm, Farrell, W. M., A. R. Poppe, M. I. Zimmerman, J. S. Halekas, G. T. Delory, and R. M. Killen J. Geophys. Res. Planets, 118, doi:10.1002/jgre.20086., 2013

Periodic bursts of Jovian non-Io decametric radio emission Author(s): Panchenko, M.; Rucker, H. O.; Farrell, W. M. Source: PLANETARY AND SPACE SCIENCE Volume: 77 Special Issue: SI Pages: 3-11 DOI: 10.1016/j.pss.2012.08.015 Published: MAR 2013

2012

Solar-Storm/Lunar Atmosphere Model (SSLAM): An overview of the effort and description of the driving storm environment Author(s): Farrell, W. M.; Halekas, J. S.; Killen, R. M.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 117 Article Number: E00K04 DOI: 10.1029/2012JE004070 Published: OCT 9 2012
Particle-in-cell simulations of the solar wind interaction with lunar crustal magnetic anomalies: Magnetic cusp regions Author(s): Poppe, A. R.; Halekas, J. S.; Delory, G. T.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS Volume: 117 Article Number: A09105 DOI: 10.1029/2012JA017844 Published: SEP 20 2012

ARTEMIS observations of lunar pick-up ions in the terrestrial magnetotail lobes Author(s): Poppe, A. R.; Samad, R.; Halekas, J. S.; et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 39 Article Number: L17104 DOI: 10.1029/2012GL052909 Published: SEP 15 2012

Plasma wake simulations and object charging in a shadowed lunar crater during a solar storm Author(s): Zimmerman, M. I.; Jackson, T. L.; Farrell, W. M.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 117 Article Number: E00K03 DOI: 10.1029/2012JE004094 Published: AUG 17 2012

Lunar pickup ions observed by ARTEMIS: Spatial and temporal distribution and constraints on species and source locations Author(s): Halekas, J. S.; Poppe, A. R.; Delory, G. T.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 117 Article Number: E06006 DOI: 10.1029/2012JE004107 Published: JUN 30 2012

Lunar precursor effects in the solar wind and terrestrial magnetosphere Author(s): Halekas, J. S.; Poppe, A. R.; Farrell, W. M.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS Volume: 117 Article Number: A05101 DOI: 10.1029/2011JA017289 Published: MAY 2 2012

The electromagnetic pickup of submicron-sized dust above Enceladus's northern hemisphere Author(s): Farrell, William M.; Wahlund, Jan-Erik; Morooka, Michiko; et al. Source: ICARUS Volume: 219 Issue: 1 Pages: 498-501 DOI: 10.1016/j.icarus.2012.02.033 Published: MAY 2012

The effect on the lunar exosphere of a coronal mass ejection passage Author(s): Killen, R. M.; Hurley, D. M.; Farrell, W. M. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 117 Article Number: E00K02 DOI: 10.1029/2011JE004011 Published: MAR 8 2012

A comparison of ARTEMIS observations and particle-in-cell modeling of the lunar photoelectron sheath in the terrestrial magnetotail Author(s): Poppe, A. R.; Halekas, J. S.; Delory, G. T.; et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 39 Article Number: L01102 DOI: 10.1029/2010GL043189 Published: FEB 2012

Solar wind electron interaction with the dayside lunar surface and crustal magnetic fields: Evidence for precursor effects Author(s): Halekas, J. S.; Poppe, A.; Delory, G. T.; et al. Source: EARTH PLANETS AND SPACE Volume: 64 Issue: 2 Pages: 73-82 DOI: 10.5047/eps.2011.03.008 Published: 2012

2011

Dusty plasma in the vicinity of Enceladus Author(s): Morooka, M. W.; Wahlund, J. -E.; Eriksson, A. I.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS Volume: 116 Article Number: A12221 DOI: 10.1029/2011JA017038 Published: DEC 20 2011

ARTEMIS Science Objectives Author(s): Sibeck, D. G.; Angelopoulos, V.; Brain, D. A.; et al. Source: SPACE SCIENCE REVIEWS Volume: 165 Issue: 1-4 Pages: 59-91 DOI: 10.1007/s11214-011-9777-9 Published: DEC 2011

First Results from ARTEMIS, a New Two-Spacecraft Lunar Mission: Counter-Streaming Plasma Populations in the Lunar Wake Author(s): Halekas, J. S.; Angelopoulos, V.; Sibeck, D. G.; et al. Source: SPACE SCIENCE REVIEWS Volume: 165 Issue: 1-4 Pages: 93-107 DOI: 10.1007/s11214-010-9738-8 Published: DEC 2011
Regarding the possible generation of a lunar nightside exo-ionosphere Author(s): Farrell, W. M.; Halekas, J. S.; Stubbs, T. J.; et al. Source: ICARUS Volume: 216 Issue: 1 Pages: 169-172 DOI: 10.1016/j.icarus.2011.08.013 Published: NOV 2011

Lunar surface electric potential changes associated with traversals through the Earth's foreshock , Author(s): Collier, Michael R.; Hills, H. Kent; Stubbs, Timothy J.; et al. Conference: 1st Workshop on Lunar Dust, Plasma and Atmosphere - The Next Steps (LDAP) Location: Boulder, CO Date: JAN 27-29, 2010 Sponsor(s): NASA Lunar Sci Inst (NLSI), Colorado Ctr Lunar Dust & Atmospher Studies (CCLDAS) Source: PLANETARY AND SPACE SCIENCE Volume: 59 Issue: 14 Special Issue: SI Pages: 1727-1743 DOI: 10.1016/j.pss.2010.12.010 Published: NOV 2011

New views of the lunar plasma environment Author(s): Halekas, J. S.; Saito, Y.; Delory, G. T.; et al. Conference: 1st Workshop on Lunar Dust, Plasma and Atmosphere - The Next Steps (LDAP) Location: Boulder, CO Date: JAN 27-29, 2010 Sponsor(s): NASA Lunar Sci Inst (NLSI), Colorado Ctr Lunar Dust & Atmospher Studies (CCLDAS) Source: PLANETARY AND SPACE SCIENCE Volume: 59 Issue: 14 Special Issue: SI Pages: 1681-1694 DOI: 10.1016/j.pss.2010.08.010 Published: NOV 2011

Solar wind access to lunar polar craters: Feedback between surface charging and plasma expansion Author(s): Zimmerman, M. I.; Farrell, W. M.; Stubbs, T. J.; et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 38 Article Number: L19202 DOI: 10.1029/2011GL048880 Published: OCT 5 2011

On the role of dust in the lunar ionosphere Author(s): Stubbs, T. J.; Glenar, D. A.; Farrell, W. M.; et al. Source: PLANETARY AND SPACE SCIENCE Volume: 59 Issue: 13 Pages: 1659-1664 DOI: 10.1016/j.pss.2011.05.011 Published: OCT 2011

First remote measurements of lunar surface charging from ARTEMIS: Evidence for nonmonotonic sheath potentials above the dayside surface Author(s): Halekas, J. S.; Delory, G. T.; Farrell, W. M.; et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS Volume: 116 Article Number: A07103 DOI: 10.1029/2011JA016542 Published: JUL 27 2011

Discharging of Roving Objects in the Lunar Polar Regions Author(s): Jackson, T. L.; Farrell, W. M.; Killen, R. M.; et al. Source: JOURNAL OF SPACECRAFT AND ROCKETS Volume: 48 Issue: 4 Pages: 700-704 DOI: 10.2514/1.51897 Published: JUL-AUG 2011

Characteristics of the dust-plasma interaction near Enceladus' South Pole Author(s): Shafiq, Muhammad; Wahlund, J. -E.; Morooka, M. W.; et al. Source: PLANETARY AND SPACE SCIENCE Volume: 59 Issue: 1 Pages: 17-25 DOI: 10.1016/j.pss.2010.10.006 Published: JAN 2011

2010

RADIO OBSERVATIONS OF HD 80606 NEAR PLANETARY PERIASTRON Author(s): Lazio, T. Joseph W.; Shankland, P. D.; Farrell, W. M.; et al. Source: ASTRONOMICAL JOURNAL Volume: 140 Issue: 6 Pages: 1929-1933 DOI: 10.1088/0004-6256/140/6/1929 Published: DEC 2010

Modification of the plasma in the near-vicinity of Enceladus by the enveloping dust Author(s): Farrell WM, Kurth WS, Tokar RL, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 37 Article Number: L20202 Published: OCT 26 2010

Non-detection of impulsive radio signals from lightning in Martian dust storms using the radar receiver on the Mars Express spacecraft Author(s): Gurnett DA, Morgan DD, Granroth LJ, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 37 Article Number: L17802 Published: SEP 1 2010

Martian dust devil electron avalanche process and associated electrochemistry Author(s): Jackson TL, Farrell WM, Delory GT, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 115 Article Number: E05006 Published: MAY 22 2010
Anticipated electrical environment within permanently shadowed lunar craters  Author(s): Farrell WM, Stubbs TJ, Halekas JS, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 115 Article Number: E03004  Published: MAR 24 2010

Hybrid Simulations of Plasma-Neutral-Dust Interactions at Enceladus  Author(s): Omidi, N.; Russell, C. T.; Tokar, R. L.; et al. Book Editor(s): LeRoux, JA; Florinski, V; Zank, GP; et al. Conference: 9th Annual International Astrophysics Conference Location: Maui, HI Date: MAR 14-19, 2010 , Sponsor(s): Ctr Space Plasma & Aeronom Res  Source: PICKUP IONS THROUGHOUT THE HELIOSPHERE AND BEYOND  Book Series: AIP Conference Proceedings  Volume: 1302  Pages: 237-242  Published: 2010

Detection of dusty plasma near the E-ring of Saturn  Author(s): Wahlund JE, Andre M, Eriksson AIE, et al. Source: PLANETARY AND SPACE SCIENCE  Volume: 57  Issue: 14-15  Pages: 1795-1806  Published: DEC 2009 [NISI]

Sounding the subsurface of Athabasca Valles using MARSIS radar data: Exploring the volcanic and fluvial hypotheses for the origin of the rafted plate terrain  Author(s): Boisson J, Heggy E, Clifford SM, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 114 Article Number: E08003  Published: AUG 21 2009

Is the Martian water table hidden from radar view?  Author(s): Farrell WM, Plaut JJ, Cummer SA, et al. Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 36 Article Number: L15206  Published: AUG 14 2009

MARSIS radar sounder observations in the vicinity of Ma'adim Vallis, Mars  Author(s): White OL, Safaeinili A, Plaut JJ, et al. Source: ICARUS  Volume: 201  Issue: 2  Pages: 460-473  Published: JUN 2009

Lunar surface charging during solar energetic particle events: Measurement and prediction  Author(s): Halekas JS, Delory GT, Lin RP, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS  Volume: 114 Article Number: A05110  Published: MAY 28 2009

Electron density dropout near Enceladus in the context of water-vapor and water-ice  Author(s): Farrell WM, Kurth WS, Gurnett DA, et al. Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 36 Article Number: L10203  Published: MAY 20 2009

Exploring the Martian Subsurface of Athabasca Using MARSIS Radar Data: Testing the Volcanic and Fluvial Hypotheses for the Origin of the Morphology  Author(s): Boisson J, Heggy E, Frigeri A, et al. Conference Information: 2009 IEEE Radar Conference, MAY 04-08, 2009 Pasadena, CA Source: 2009 IEEE RADAR CONFERENCE, VOLS 1 AND 2  Book Series: IEEE Radar Conference  Pages: 763-767  Published: 2009

Lunar Prospector measurements of secondary electron emission from lunar regolith  Author(s): Halekas JS, Delory GT, Lin RP, et al. Source: PLANETARY AND SPACE SCIENCE  Volume: 57  Issue: 1  Pages: 78-82 Published: JAN 2009

Ground-based and space-based radio observations of planetary lightning  Author(s): Zarka P, Farrell W, Fischer G, et al. Source: SPACE SCIENCE REVIEWS  Volume: 137  Issue: 1-4  Pages: 257-269  Published: JUN 2008 [NISI]

Concerning the dissipation of electrically charged objects in the shadowed lunar polar regions  Author(s): Farrell WM, Stubbs TJ, Delory GT, et al. Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 35  Issue: 19 Article Number: L19104  Published: OCT 4 2008
Lunar Prospector observations of the electrostatic potential of the lunar surface and its response to incident currents
Author(s): Halekas JS, Delory GT, Lin RP, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS Volume: 113 Issue: A9 Article Number: A09102 Published: SEP 4 2008

Effect of dust absorption on the electron avalanche process occurring within Martian dust storms
Author(s): Jackson TL, Farrell WM, Delory GT, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 35 Issue: 16 Article Number: L16201 Published: AUG 21 2008

Atmospheric electricity at Saturn
Author(s): Fischer G, Gurnett DA, Kurth WS, et al. Source: SPACE SCIENCE REVIEWS Volume: 137 Issue: 1 Pages: 271-285 Published: JUN 2008

MARSIS subsurface radar investigations of the South Polar reentrant Chasma Australe
Author(s): Farrell WM, Clifford SM, Milkovich SM, et al. Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS Volume: 113 Issue: E4 Article Number: E04002 Published: APR 11 2008

Loss of solar wind plasma neutrality and affect on surface potentials near the lunar terminator and shadowed polar regions
Author(s): Farrell WM, Stubbs TJ, Halekas JS, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 35 Issue: 5 Article Number: L05105 Published: MAR 13 2008

Mass unloading along the inner edge of the Enceladus plasma torus
Author(s): Farrell WM, Kaiser ML, Gurnett DA, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 22 Article Number: L22104 Published: NOV 28 2007

2007
Radar sounding of the Medusae Fossae Formation Mars: Equatorial ice or dry, low-density deposits?
Author(s): Watters TR, Campbell B, Carter L, et al. Source: SCIENCE Volume: 318 Issue: 5853 Pages: 1125-1128 Published: NOV 16 2007

Observation of similar radio signatures at Saturn and Jupiter: Implications for the magnetospheric dynamics
Author(s): Louarn P, Kurth WS, Gurnett DA, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 20 Article Number: L20113 Published: OCT 31 2007

Nondetection of Titan lightning radio emissions with Cassini/RPWS after 35 close Titan flybys
Author(s): Fischer G, Gurnett DA, Kurth WS, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 22 Article Number: L22104 Published: NOV 28 2007

Predictions of dust concentrations in the lunar exosphere, T. J. Stubbs, R. R. Vondrak, W. M. Farrell, M. R. Collier, J. Astronautics, 28, 166-167, 1000-1328(2007)Sup-0166-02, 2007. [NISI]

Are Saturn electrostatic discharges really superbolts? A temporal dilemma
Author(s): Farrell WM, Kaiser ML, Fischer G, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 6 Article Number: L06202 Published: MAR 27 2007

Subsurface radar sounding of the south polar layered deposits of Mars
Author(s): Plaut JJ, Picardi G, Safaeinili A, et al. Source: SCIENCE Volume: 316 Issue: 5821 Pages: 92-95 Published: APR 6 2007

Complex electric fields near the lunar terminator: The near-surface wake and accelerated dust
Author(s): Farrell WM, Stubbs TJ, Vondrak RR, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 14 Article Number: L14201 Published: JUL 18 2007

Extreme lunar surface charging during solar energetic particle events
Author(s): Halekas JS, Delory GT, Brain DA, et al. Source: GEOPHYSICAL RESEARCH LETTERS Volume: 34 Issue: 2 Article Number: L02111 Published: JAN 30 2007
Searching for planets around "adolescent" stars  
Author(s): Lazio J, Farrell WM, Clark JW, et al.  
Source: ASTROBIOLOGY  Volume: 7  Issue: 3  Pages: 519-520  Meeting Abstract: P-54  Published: JUN 2007

Magnetospheric emissions from the planet orbiting tau Bootis: A multiepoch search  
Author(s): Lazio TJW, Farrell WM  
Source: ASTROPHYSICAL JOURNAL  Volume: 668  Issue: 2  Pages: 1182-1188  Part: Part 1  Published: OCT 20 2007

Absorption of MARSIS radar signals: Solar energetic particles and the daytime ionosphere  
Author(s): Espley JR, Farrell WM, Brain DA, et al.  
Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 34  Issue: 9  Article Number: L09101  Published: MAY 2 2007

A dynamic fountain model for dust in the lunar exosphere  
Author(s): Stubbs TJ, Vondrak RR, Farrell WM  
Conference Information: Workshop on Dust in Planetary Systems, SEP 26-30, 2005 Kauai, HI  
Source: Workshop on Dust in Planetary Systems  Book Series: ESA SPECIAL PUBLICATIONS  Volume: 643  Pages: 185-189  Published: 2007

Lunar surface charging: A global perspective using lunar prospector data  
Author(s): Stubbs TJ, HalekaS JS, Farrell WM, et al.  
Conference Information: Workshop on Dust in Planetary Systems, SEP 26-30, 2005 Kauai, HI  
Source: Workshop on Dust in Planetary Systems  Book Series: ESA SPECIAL PUBLICATIONS  Volume: 643  Pages: 181-184  Published: 2007

Impact of dust on lunar exploration  
Author(s): Stubbs TJ, Vondrak RR, Farrell WM  
Conference Information: Workshop on Dust in Planetary Systems, SEP 26-30, 2005 Kauai, HI  
Source: Workshop on Dust in Planetary Systems  Book Series: ESA SPECIAL PUBLICATIONS  Volume: 643  Pages: 239-243  Published: 2007

2006

Martian dust storms as a possible sink of atmospheric methane  
Author(s): Farrell WM, Delory GT, Atreya SK  
Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 33  Issue: 21  Article Number: L21203  Published: NOV 10 2006

A model of the ULF magnetic and electric field generated from a dust devil  
Author(s): Farrell WM, Marshall JR, Cummer SA, et al.  
Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 111  Issue: E11  Article Number: E11004  Published: NOV 17 2006

Physical properties and detection of Saturn’s lightning radio bursts, P. Zarka, B. Cecconi, L. Denis, W. M. Farrell, et al., In “Planetary Radio Emissions VI”, P. 111, Ed. Rucker H. O., et al., Verlag, Vienna, 2006 [NIPI]

MARSIS radar sonde evidence of buried basins in the northern lowlands of Mars  
Author(s): Watters TR, Leuschen CJ, Plaut JJ, et al.  
Source: NATURE  Volume: 444  Issue: 7121  Pages: 905-908  Published: DEC 14 2006

Cassini RPWS and imaging observations of Saturn lightning, M. D. Desch et al., In “Planetary Radio Emissions VI”, P. 103, Ed. Rucker H. O., et al., Verlag, Vienna, 2006 [NIPI]

Changing electrical nature of Saturn's rings: Implications for spoke formation  
Author(s): Farrell WM, Desch MD, Kaiser ML, et al.  
Source: GEOPHYSICAL RESEARCH LETTERS  Volume: 33  Issue: 7  Article Number: L07203  Published: APR 5 2006

Electrostatic fields in dust devils: An analog to mars  
Author(s): Jackson TL, Farrell WM  
Source: IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING  Volume: 44  Issue: 10  Pages: 2942-2949  Part: Part 2  Published: OCT 2006

Saturn lightning recorded by Cassini/RPWS in 2004  
Author(s): Fischer G, Desch MD, Zarka P, et al.  
Source: ICARUS  Volume: 183  Issue: 1  Pages: 135-152  Published: JUL 2006
Application of an orbital radar sounder model to detecting Martian polar subsurface features  Author(s): Xu YB, Cummer SA, Farrell WM  Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 111  Issue: E6  Article Number: E06S17  Published: MAY 13 2006

Radio detection of extrasolar planets: Present and Future prospects,  Lazio, T. J. L., and W. M. Farrell, In “Planetary Radio Emissions VI”, P. 603, Ed. Rucker H. O., et al., Verlag, Vienna, 2006 [NISI]

On the intensity of Saturn lightning,  G. Fischer, W. Macher, M. D. Desch et al., In “Planetary Radio Emissions VI”, P. 123, Ed. Rucker H. O., et al., Verlag, Vienna, 2006 [NISI]

Oxidant enhancement in martian dust devils and storms: Implications for life and habitability  Author(s): Atreya SK, Wong AS, Renno NO, et al.  Source: ASTROBIOLOGY  Volume: 6  Issue: 3  Pages: 439-450  Published: JUN 2006

Oxidant enhancement in martian dust devils and storms: Storm electric fields and electron dissociative attachment  Author(s): Delory GT, Farrell WM, Atreya SK, et al.  Source: ASTROBIOLOGY  Volume: 6  Issue: 3  Pages: 451-462  Published: JUN 2006

Quasi-electrostatic field analysis and simulation of Martian and terrestrial dust devils  Author(s): Zhai Y, Cummer SA, Farrell WM  Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 111  Issue: E6  Article Number: E06016  Published: JUN 27 2006

Radiation impedance over a thunderstorm  Author(s): Farrell WM, Goldberg RA, Blakeslee RJ, et al.  Source: RADIO SCIENCE  Volume: 41  Issue: 3  Article Number: RS3008  Published: JUN 24 2006

Integration of electrostatic and fluid dynamics within a dust devil  Author(s): Farrell WM, Renno N, Delory GT, et al.  Source: JOURNAL OF GEOPHYSICAL RESEARCH-PLANETS  Volume: 111  Issue: E1  Article Number: E01006  Published: JAN 28 2006

A dynamic fountain model for lunar dust,  T. J. Stubbs, R. R. Vondrak, W. M. Farrell, ADVANCES IN SPACE RESEARCH  Volume: 37  Issue: 1  Pages: 59-66  Published: 2006

2005

Radar soundings of the subsurface of Mars  Author(s): Picardi G, Plaut JJ, Biccardi D, et al.  Source: SCIENCE  Volume: 310  Issue: 5756  Pages: 1925-1928  Published: DEC 23 2005

Narrowband z-mode emissions interior to Saturn’s plasma torus,  W. M. Farrell, W. S. Kurth, M. L. Kaiser, M. D. Desch, D. A. Gurnett, and P. Canu, J. Geophys. Res., 110, Art. No. A10204, 2005.

A nightside source of Saturn’s kilometric radiation: Evidence for an inner magnetosphere energy driver,  W. M. Farrell, M. D. Desch, M. L. Kaiser, A. Lecacheux, W. S. Kurth, D. A. Gurnett, B. Cecconi, and P. Zarka, Geophys. Res. Lett., 32, Art. No. L18107, 2005.

Lightning optical pulse statistics from storm overflights during the Altus Cumulus Electrification Study,  D. M. Mach, R. J. Blakeslee, J. C. Bailey, W. M. Farrell, R. A. Goldberg, M. D. Desch, and J. G. Houser, Atmosph. Res., 76, 386, 2005.

Detecting sub-glacial aquifers in the north polar layered deposits with MarsExpress/MARSIS,  W. M. Farrell, J.J. Plaut, D. A. Gurnett, and G. Picardi, Geophys. Res. Lett., 32, Art No. L11204, 2005.

Radio and plasma wave observations at Saturn from Cassini’s approach and first orbit,  DA Gurnett, Kurth WS, Hospodarsky GB, Persson AM, Averkamp TF, Cecconi B, Lecacheux A, Zarka P, Canu P, Cornilleau-Wehrlin N, Galeopeau P, Roux A, Harvey C, Louarn P, Bostrom R, Gustafsson G, Wahlund JE, Desch MD, Farrell WM, Kaiser ML, Goetz K, Kellogg PJ, Fischer G, Ladreiter HP, Rucker H, Alleyne H, Pedersen A, Science, 307, 1255, 2005.
An Earth-like correspondence between Saturn’s auroral features and radio emission, W. S. Kurth, D. A. Gurnett, J. T. Clark, P. Zarka, M.D. Desch, M. L. Kaiser, B. Cecconi, A. Lecacheux, W. M. Farrell, P. Galopeau, J. C. Gerard, D. Grodent, R. Prange, M. K. Dougherty, and F. J. Crary, Nature, 433, 722, 2005.

Low density anomalies and sub-Alfvenic solar wind, A. V. Usmanov, M. L. Goldstein, W. M. Farrell, J. Geophys. Res., 110, Art No. A01106, 2005.

2004

The radio search for extrasolar planets with LOFAR, W. M. Farrell, T. J. W. Lazio, P. Zarka, T. J. Bastian, M. D. Desch, and B. P. Ryabov, Planetary and Space Sci., 52, 1469, 2004.

Study of solar system planetary lightning with LOFAR, P. Zarka, W. M. Farrell, M. L. Kaiser, E. Blanc, W. S. Kurth, Planetary and Space Sci., 52, 1435, 2004.

The radiometric Bode’s law and extrasolar planets, T. J. W. Lazio, W. M. Farrell, J. Dietrick, E. Greenlees, E. Hogan, C. Jones, and L. A. Henning, Astrophys. J., 612, 511, 2004.

Wind observations of extreme ion temperature anisotropies in the lunar wake, D. Clack, J. C. Kasper, A. J. Lazarus, J. T. Steinberg, and W. M. Farrell, Geophys. Res. Lett., 31, Art. No. L06812, 2004.

New observations from Ulysses and Cassini of Jovian VLF radio emission, M. L. Kaiser, W. M. Farrell, M. D. Desch, W. S. Kurth, G. B. Hospodarsky, and D. A. Gurnett, J. Geophys. Res., 109, Art. No. A09S08, 2004.

Matador 2002: A pilot field experiment on convective plumbs and dust devils, N. O. Renno, V. J. Abreu, J. Kock, P. H. Smith, O. Hartogensis, H. A. R. De Bruin, D. Burose, G. T. Delory, W. M. Farrell, C. J. Watts, J. Garatuza, M. Parker, A. Cardswell, J. Geophys. Planets, 109, Art. No. E07001, 2004.

Remote sensing of possible plasma density bubbles in the inner Jovian dayside magnetosphere, W. M. Farrell, M. L. Kaiser, W. S. Kurth, M. D. Desch, D. A. Gurnett, G. B. Hospodarsky, and R. J. MacDowall, J. Geophys. Res., 109, Art. No. A09S14, 2004.

Electric and magnetic signatures of dust devils from the 2000-2001 MATADOR desert tests, W. M. Farrell, P. H. Smith, G. T. Delory, G. B. Hillard, J. R. Marshall, D. Catling, M. Hecht, D. M. Tratt, N. Renno, M. D. Desch, S. A. Cummer, J. G. Houser, and B. Johnson, J. Geophys. Res., 109, Art No. E03004, 2004.

Radio emission from extrasolar planets, W. M. Farrell, T. J. W. Lazio, M. D. Desch, T. S. Bastian, and P. Zarka, in “Bioastronomy 2002: Life among the stars”, ed R. Norris and F. Stootman, ASP Conference Series, 213,73, 2004.

The Cassini radio and plasma wave investigation, DA Gurnett, WS Kurth, DL Kirchner, GB Hospodarsky, TF Averkamp, P Zarka, A Lecacheux, R Manning, A Roux, P Canu, N Cornilleau-Wehrlin, P Galopeau, A Meyer, R Bostrom, G Gustafsson, JE Wahlund, L Ahlen, HO Rucker, HP Ladreiter, W Macher, LJC Woolliscroft, H Alleyne, ML Kaiser, MD Desch, WM Farrell, CC Harvey, P Louran, PJ Kellogg, K Goetz, and A Pedersen, Space Sci. Rev., 114, 345, 2004.

Relativistic cyclotron resonance condition as applied to Type II interplanetary radio emission, W. M. Farrell, M. L. Kaiser, S. D. Bale, M. D. Desch, R. J. Fitzenreiter, K. Goetz, and J.-L. Bougeret, J. Geophys. Res., 109, Art No. A02106, 2004.

2003

The role of upper hybrid waves in magnetic reconnection, W. M. Farrell, M. D. Desch, K. W. Ogilvie, and M. L. Kaiser, Geophys. Res. Lett., 30, Art. No. 2259, 2003.
A simple electrodynamic model of a dust devil, W. M. Farrell, G. T. Delory, S. A. Cummer, and J. R. Marshall, Geophys. Res. Lett., 30, Art. No. 2050, 2003.

Limits on the magnetosphere/stellar wind interactions for the extrasolar planet about Tau Bootes, W. M. Farrell, M. D. Desch, T. J. Lazio, T. Bastian, and P. Zarka, in “Scientific frontiers in research on extrasolar planets” ed by D. Demig and S. Seagar, Astronomical Society of the Pacific Conference Series 294, 2003.

ULF and ELF magnetic signature of a terrestrial dust devil, JG Houser, WM Farrell, and S. M. Metzger, Geophys. Res. Lett., 30, Art. No. 1027, 2003.

2002

Similarities in the plasma wake of the moon and Space Shuttle, W. M. Farrell, A. C. Tribble, and J. T. Steinberg, J. Spacecraft and Rockets, 39, 749, 2002.

The dominance of electron plasma waves near a reconnection X-line region, WM Farrell, MD Desch, ML Kaiser, and K Goetz, Geophys. Res. Lett, 29, Art. No. 1902, 2002.

Continuum emission and broadband electrostatic noise at the low latitude boundary layer: A diagnostic of boundary layer dynamics, WM Farrell, RJ Fitzenreiter, ML Kaiser, K Goetz, M Maksimovic, MJ Reiner, Geophys. Res. Lett, 29, Art. No. 1580, 2002.

Finite size scaling in the solar wind magnetic field energy density as seen by WIND, B. Hnat, SC Chapman, G. Rowlands, NM Watkins, and WM Farrell, Geophys. Res. Lett., 29, 2001GL014587, 2002.

Solar proton events and the fair-weather electric field at ground, W. M. Farrell and M. D. Desch, Geophys. Res. Lett., 29, 2001GL013908, 2002.

The dusk flank of Jupiter’s magnetosphere, W. S. Kurth, D. A. Gurnett, G. B. Hospodarsky, W. M. Farrell, A. Roux, M. K. Dougherty, S. P. Joy, M. G. Kivelson, R. J. Walker, F. J. Cray, and C. J. Alexander, Nature, 415, 991, 2002.

Control of Jupiter’s radio emission and aurora by the solar wind, D. A. Gurnett, W. S. Kurth, G. B. Hospodarsky, A. M. Persoon, P. Zarka, A Lecacheux, S. J. Bolton, M. D. Desch, W. M. Farrell, M. L. Kaiser, H. P. Ladreiter, H. O. Rucker, P. Galopeau, P. Louran, D. T. Young, W. R. Pryor, and M. K. Dougherty, Nature, 415, 985, 2002.

2001

Direct generation of o-mode emission in a dense warm plasma: Applications to interplanetary type II emissions and others in its class, WM Farrell, J. Geophys. Res., 106, 15701, 2001.

High resolution observations of low frequency Jovian radio emission by Cassini, W. S. Kurth, G. B. Hospodarsky, D. A. Gurnett, A. Lecacheux, P. Zarka, M. D. Desch, M. L. Kaiser, and W. M. Farrell, in “Planetary Radio Emission V”, ed. By H. O. Rucker, M. L. Kaiser, and Y. LeBlanc, Austrian Academy of Science, Vienna, 2001. [NISI]

Ulysses and Cassini at Jupiter: Comparison of the quasi-periodic radio bursts, M. L. Kaiser, W. M. Farrell, M. D. Desch, G. B. Hospodarsky, W. S. Kurth, and D. A. Gurnett, in “Planetary Radio Emission V”, ed. By H. O. Rucker, M. L. Kaiser, and Y. LeBlanc, Austrian Academy of Science, Vienna, 2001. [NISI]

Non-detection at Venus of high-frequency radio signals characteristic of terrestrial lightning, D. A. Gurnett, P. Zarka, R. Manning, W. S. Kurth, G. B. Hospodarsky, T. F. Averkamp, M. L. Kaiser, and W. M. Farrell, Nature, 409, 313, 2001.

Reconnection remnants in the magnetic cloud of October 18-19 1995: A shock, monochromatic wave, heat flux dropout and energetic ion beam, M. R. Collier, A Szabo, W. Farrell, J. A. Slavin, R. P. Lepping, R. Fitzenreiter, B.
Thompson, D.C. Hamilton, G. Gloeckler, G. C. Ho, P. Bochsler, D. Larson, and L. Ofman, J. Geophys. Res., 106, 15985, 2001.

Is there a Martian Atmospheric Electric Circuit?, W. M. Farrell and M. D. Desch, J. Geophys. Res., 106, 7591, 2001.

2000

A view of the inner heliosphere during the May 10-11, 1999 low density anomaly. A. V. Usmanov, M. L. Goldstein, and W. M. Farrell, Geophys. Res. Lett., 27, 3765, 2000.

Terrestrial LF Bursts: Escape Paths and Wave Intensification, M. D. Desch and W. M. Farrell, in "Radio Astronomy at Long Wavelengths" ed. By RG Stone, KW Weiler, ML Goldstein, and JL Bougeret, AGU Monograph, 2000. [NISI]

The ALFA medium explorer mission, Jones DL, Allen RJ, Basart JP, Bastian T, Blume WH, Bougeret JL, Dennison BK, Desch MD, Dwarakanath KS, Erickson WC, Farrell W, Finley DG, Gopalswamy N, Howard RE, Kaiser ML, Kassim NE, Kuiper TBH, MacDowall RJ, Mahoney MJ, Perley RA, Preston RA, Reiner MJ, Rodriguez P, Stone RG, Unwin SC, Weiler KW, Woan G, Woo R, VSOP results and the future of space VLBI, Advances in Space Research, 26, 743-746, 2000. [NISI]

Planetary Radio Emission from Lightning: Discharge and Delectability, W. M. Farrell, in "Radio Astronomy at Long Wavelengths" ed. By RG Stone, KW Weiler, ML Goldstein, and JL Bougeret, AGU Monograph, 2000. [NISI]

Radio and optical detection of Martian dust storm discharges, WM Farrell, ML Kaiser, MD Desch, JG Houser, DM Wilt, and GA Landis, Acta Astronaut, 46, 25, 2000.

1999

A model of the lightning discharge at Jupiter, WM Farrell, ML Kaiser, MD Desch, Geophys. Res. Lett., 26, 2601, 1999.

Radio atmospheric propagation on Mars and potential remote sensing applications, SA Cummer and WM Farrell, J. Geophys. Res., 104, 14149, 1999. [NISI]

On the possibility of coherent cyclotron emission from extrasolar planets, WM Farrell, MD Desch, and P Zarka, J. Geophys. Res., 104, 14025, 1999.

Detecting electrical activity from Martian dust storms, WM Farrell, ML Kaiser, MD Desch, JG Houser, SA Cummer, DM Wilt, and GA Landis, J. Geophys. Res., 104, 3795, 1999.

O-mode emission at the Io torus: A real or virtual source?, WM Farrell, RA Hess, and RJ MacDowall, Geophys. Res. Lett., 26, 1, 1999.

1998

A simple simulation of a plasma void: Applications to WIND observations of the lunar wake, Farrell, WM, M. L. Kaiser, J.T Steinberg, and S. J. Bale, J. Geophys. Res., 103, 23653, 1998.

Modification of the ionosphere over power lines: a geological effect, W. M. Farrell, M. D. Desch, and J. G. Houser, J. Geophys. Res., 103, 11573, 1998.

1997
Electrostatic instability in the central lunar wake: A process for replenishing the plasma void?, Farrell, WM, M.L. Kaiser, and J. T. Steinberg, Geophys. Res. Lett., 24, 1135, 1997.

1996

Control of terrestrial low-frequency bursts by solar wind speed, M. D. Desch, M. L. Kaiser, and W. M. Farrell, Geophys. Res. Lett., 23, 1251, 1996.

LF band terrestrial radio bursts observed by WIND/WAVES, M. L. Kaiser, M. D. Desch, W. M. Farrell, J.-L. Steinberg, and M. L. Reiner, Geophys. Res. Lett., 23, 1283, 1996.

The lunar wake at 6.8 RL: WIND magnetic field observations, C. J. Owen, R. P. Lepping, K. W. Ogilvie, J. A. Slavin, W. M. Farrell, and J. B. Byrnes, Geophys. Res. Lett., 23, 1263, 1996.

Observations of the lunar plasma wake from the WIND spacecraft on December 27 1994, K. W. Ogilvie, J. T. Steinberg, R. J. Fitzenreiter, C. J. Owen, A. J. Lazarus, W. M. Farrell, and R. B. Torbert, Geophys. Res. Lett., 23, 1255, 1996.

Upstream ULF waves and energetic electrons associated with the lunar wake: Detection of precursor activity, W. M. Farrell, R. J. Fitzenreiter, C. J. Owen, J. B. Byrnes, R. P. Lepping, K. W. Ogilvie, and F. Neubauer, Geophys. Res. Lett, 23, 1271, 1996.

Are Neptune's whistlers really z-mode radiation?, W. M. Farrell, Geophys. Res. Lett, 23, 587, 1996.

1995

Traversal of comet SL-9 through the Jovian magnetosphere and impact with Jupiter: Radio upper limits, M. D. Desch, M. L. Kaiser, W. M. Farrell, R. J. MacDowell, and R. G. Stone, Geophys. Res. Lett., 22, 1781, 1995.

Fine structure of the auroral kilometric radiation: A Fermi acceleration process?, W. M. Farrell, Radio Sci., 30, 961, 1995

Focusing of nondonducted whistlers by the equatorial anomaly, V. S. Sonwalker, U. S. Inan, T. L. Aggson, W. M. Farrell, and R. Pfaff, J. Geophys. Res., 100,7783, 1995.

A method for calibrating magnetometers on a spinning spacecraft, W. M. Farrell, R. F. Thompson, R. P. Lepping, and J. B. Byrnes, IEEE Magnetics, 31, 966, 1995.

The WIND magnetic field instrument (MFI), R. P. Lepping, M. H. Acuna, L. F. Burlaga, W. M. Farrell, J. S. Slavin, K. H. Schatten, F. Mariani, N. F. Ness, F. M. Neubauer, Y. C. Whang, J. B. Byrnes, P. V. Panetta, J. Scheifele, and E. M. Worley, Space Sci. Rev., 71,207, 1995.

Radio emissions from Neptune, P. Zarka, B. M. Pedersen, A. Lecacheux, M. L. Kaiser, M. D. Desch, W. M. Farrell, W. S. Kurth, Neptune, Ed. D. P. Cruikshank, Univ. of Arizona Press, Tucson, 1995.

1994

An analysis of whistler waves at interplanetary shocks, D. Langyel-Frey, W. M. Farrell, R. G. Stone, A. Balogh, and R. Forsyth, J.Geophys. Res., 99, 13325, 1994.

Asymmetries in the Io plasma torus, M. D. Desch, W. M. Farrell, and M. L. Kaiser, J. Geophys. Res., 99, 17205, 1994.

Possible radio wave precursors associated with the comet Shoemaker-Levy 9/Jupiter impacts, W. M. Farrell, M. L. Kaiser, M. D. Desch, and R. J. MacDowall, Geophys. Res. Lett, 21, 1067, 1994.
Observations of ionospheric electric fields above atmospheric weather systems, W. M. Farrell, T. L. Aggson, E. B. Rodgers, and W. B. Hanson, J. Geophys. Res., 99, 19475, 1994.

A splitting algorithm for Vlasov simulations with filamentation filtration, A. J. Klimas, and W. M. Farrell, J. Comp. Phys, 110, 150, 1994.

1993

Quasi-periodic Jovian radio bursts: Observations from the Ulysses radio and plasma wave experiment, R. J. MacDowall, M. L. Kaiser, M. D. Desch, W. M. Farrell, R. A. Hess, and R. G. Stone, Planetary and Sp. Sci., 41, 1059, 1993.

Clock-like behavior of Jovian continuum radiation, M. L. Kaiser, M. D. Desch, W. M. Farrell, Planetary and Sp. Sci., 41, 1073, 1993.

Ordinary and z-mode emissions from the Jovian polar region, M. L. Kaiser, M. D. Desch, W. M. Farrell, R. A. Hess, and R. J. MacDowall, Planetary and Sp. Sci., 41, 977, 1993.

An interpretation of the broadband VLF waves near the Io torus as observed by Ulysses, W. M. Farrell, R. J. MacDowall, R. A. Hess, M. L. Kaiser, M. D. Desch, and R. G. Stone, J. Geophys. Res., 98, 21177, 1993.

Ulysses observation of auroral hiss at high Jovian latitudes, W. M. Farrell, R. J. MacDowall, M. D. Desch, M. L. Kaiser, R. G. Stone, N. Lin, N. Cornilleau-Wehrlin, P. Canu, S. J. Bame, I and J. L. Phillips, Geophys. Res. Lett., 20, 2259, 1993.

The heliospheric cavity radio emission: Generation of discrete tones by Fermi acceleration via oscillating boundary, W. M. Farrell, Geophys. Res. Lett, 20, 2011, 1993.

Cloud-to-Stratospheric lightning discharges: A Radio emission model - Reply, W. M. Farrell and M. D. Desch, Geophys. Res. Lett., 20, 763, 1993.

ULF Turbulence in the Neptunian polar cusp, W. M. Farrell, R. P. Lepping, and C. W. Smith, J. Geophys. Res., 98, 3631, 1993.

Cassini radio and plasma wave investigation: Data compression and scientific applications, L. J. C. Wooliscroft, W. M. Farrell, H. St. C. Alleyne, D. A. Gurnett, D. L. Kirchner, W. S. Kurth, and J. A. Thompson, J. Brit Interplanetary Soc., 46, 115, 1993. [NISI]

The nonthermal radio emissions from Uranus, W. M. Farrell, in Planetary Radio Emissions III, edited by H. O. Rucker, Osterreichischem Akademie der WissenschaRer, Vienna, Austria, 1993. [NISI]

1992

In ecliptic observations of Jovian radio emissions by Ulysses: Comparison to Voyager results, A. Lecacheux, B. M. Pedersen, P. Zarka, M. G. Aubier, M. D. Desch, W. M. Farrell, M. L. Kaiser, R. J. MacDowall, R. G. Stone, Geophys. Res. Lett, 19, 1307, 1992.

Ulysses radio and plasma waves observations in the Jupiter environment, R. G. Stone, B. M. Pedersen, C. C. Harvey, P. Canu, N. Cornilleau-Wehrlin, M. D. Desch, C. de Villedary, J. Fainberg, W. M. Farrell, K. Goetz, R. A. Hess, S. Hoang, M. L. Kaiser, P. J. Kellogg, A. Lecacheux, N. Lin, R. J. MacDowell, R. Manning, C. A. Meetre, N. Meyer-Vernet, M. Moncuquet, V. Osherovich, M. J. Reiner, A. Tekle, J. Thiessen, and P. Zarka, Science, 257, 1524, 1992.

A theory for the narrowbanded radio bursts at Uranus: MHD surface waves as an energy driver, W. M. Farrell, S. A. Curtis, M. D. Desch, and R. P. Lepping, J. Geophys. Res., 97, 4133, 1992.
Ulysses observations of escaping VLF emissions from Jupiter, M. L. Kaiser, M. D. Desch, W. M. Farrell, R. J. MacDowall, R. G. Stone, A. Lecacheux, B. M. Pedersen, and P. Zarka, Geophys. Res. Lett., 17, 649-652, 1992.

Cloud-to-Stratosphere Lightning: A Radio Emission Model, W. M. Farrell and M. D. Desch, Geophys. Res. Lett., 19, 665-668, 1992.

1991

The role of solar wind reconnection in driving the Neptunian radio emission, M. D. Desch, W. M. Farrell, M. L. Kaiser, R. P. Lepping, J. T. Steinberg, and L. A. Villanueva, J. Geophys. Res., 96, 19111-19116, 1991.

Restrictions on the Characteristics of Neptunian Lightning, M. L. Kaiser, M. D. Desch, W. M. Farrell, and P. Zarka, J. Geophys. Res., 96, 19043-19048, 1991.

Evidence of Auroral Plasma Cavities at Uranus and Neptune from Radio Burst Observations, W. M. Farrell, M. D. Desch, M. L. Kaiser, and W. Calvert, J. Geophys. Res., 96, 19049-19061, 1991.

An Anomalous Component of Neptune's Radio Emission: Implications for the Auroral Zone, M. D. Desch, W. M. Farrell and M. L. Kaiser, J. Geophys. Res., 96, 1401-1408, 1991.

1990

Field-independent Source Localization of Neptune's Radio Bursts, W. M. Farrell, M. D. Desch, and M. L. Kaiser, J. Geophys. Res., 95, 19143-19148, 1990.

The Source Location of Narrowbanded Bursts at Uranus: Evidence of a Cusp Source, W. M. Farrell, M. D. Desch, M. L. Kaiser, and W. S. Kurth, Geophys. Res. Lett., 17, 295-298, 1990.

Observations of the Earth's Polar Cusp at Large Radial Distances with the Hawkeye-I Magnetometer, W. M. Farrell and J. A. Van Allen, J. Geophys. Res., 95, 20945-20958, 1990.

The Coherent Cerenkov-Radiated Power from a Group of Field-Aligned Test Particles, W. M. Farrell and C. K. Goertz, Planetary and Sp. Sci., 38, 373-381, 1990.

New Arcs Associated with the Smooth High-Frequency Radiation from Uranus, W. M. Farrell and W. Calvert, J. Geophys. Res., 98, 8259-8264, 1990.

Wave Intensifications near the Electron Cyclotron Frequency Within the Polar Cusp, W. M. Farrell, D. A. Gurnett, J. D. Menietti, H. K. Wong, C. S. Lin, and J. L. Burch, J. Geophys. Res., 95, 6493-6504, 1990.

Comments on 'Pulsed Electron Beam Emission in Space' By Neubert et al. [1988], W. M. Farrell, J. Geomag Geoelectr., 42, 57-62, 1990.

1989

Voyager Planetary Radio Astronomy Experiment Results at Neptune, J. W. Warwick, D. R. Evans, G. R. Peltzer, R. G. Pelker, J. H. Romig, C. B. Sawyer, A. C. Riddle, A. E. Schweiker, M. D. Desch, M. L. Kaiser, W. M. Farrell, J. K. Alexander, T. D. Carr, J. de Pater, D. H. Staelin, S. Gulkis, R. L. Poynter, A. Boischot, F. Genova, Y. Leblanc, A. Lecacheux, B. Pedersen, P. Zarka, Science, 246, 1498-1501, 1989.

Source Location of the Smooth High-Frequency Radio Emissions from Uranus, W. M. Farrell and W. Calvert, Geophys. Res. Lett., 16, 341, 1989.

The Source Location and Beaming of Broadband Bursty Radio Emissions from Uranus, W. M. Farrell and W. Calvert, J. Geophys. Res., 94, 217, 1989.
Coherent Cerenkov Radiation from the Spacelab-2 Electron Beam, W.M. Farrell, D.A. Gurnett, and C.K. Goertz, J. Geophys. Res., 94, 443, 1989.

1985-1988

An Analysis of the Whistler-mode Radiation from the Spacelab-2 Electron Beam, W.M. Farrell, D.A. Gurnett, P.M. Banks, R.I. Bush, and W.J. Raitt, J. Geophys. Res., 93, 153, 1988.

AKR Signal Increases Caused By Triggering, W.M. Farrell, W. Calvert, and D.A. Gurnett, Geophys. Res. Lett., 13, 370, 1986.

A Statistical Study of Solar Type-III Bursts and Auroral Kilometric Radiation, W.M. Farrell and D A. Gurnett, J. Geophys. Res., 90, 9634, 1985.

Non-refereed Technical Reports and Proceedings

Mission to characterize volatiles in old, cold permanently shadowed regions of the Moon, D. M. Hurley et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 365.

NanoSWARM: Nanosatellites for space weathering, surface water, solar wind, and remanent magnetism, I. Garrick-Bethell et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 355.

Lunar Volatiles Orbiters, Lucey, P. G., et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 107.

Lunar polar volatile resources: Obtaining their origin prior to extraction, W. M. Farrell et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 079.

Science opportunities offered by Mercury’s ice-bearing polar deposits, A. Deutsch et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 069.

Lunar volatiles and solar system science, P. Prem et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 068.

The need for a large-scale integrated approach to ocean world modeling, W. M. Farrell et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 067.

Agnostic biosignature exploration at Europa through plume sampling, P. Mahaffy et al. (2021), Bulletin of the AAS, Vol. 53, 4, e-id. 059.

Overview of Phobos/Diemos Regolith Ion Sample Mission (PRISM) Concept, P. Clark, M. Collier, M. Schaible, W. M. Farrell, D. Folta, K. M. Hughes, J. W. Keller, B. Malphrus, A. S. Rivkin, S. Murchie, et al. (2018) in ‘Cubesats and Nanosats for Remote Sensing II’, Ed. By T. S. Pagano and C. D. Norton, Proceedings of SPIE, Vol. 10769, UNSP 1076901, DOI: 10.1117/12.2322415.

Nature of and Lessons Learned from Lunar Ice Cube and the first deep space cubesat ‘cluster’, Clark, P. R. MacDowall, W. Farrell, C. Brambora, A. Lunsford et al. (2018), in ‘Cubesats and Nanosats for Remote Sensing II’, Ed. By T. S. Pagano and C. D. Norton, Proceedings of SPIE, Vol. 10769, UNSP 107690G, DOI: 10.1117/12.2320055.

BIRCHES and Lunar cubes - Building the first deep space cubesat broadband IR Spectrometer, Clark P. E., R. J. MacDowall, W. M. Farrell, C. Brambora, T. Hurford, D. Reuter, E. Mentzell, D. Patel, S. Banks, D. Folta, N. Petro, B. Malphrus, K. Brown, C. Brandon, and P. Chapin, (2017), in ‘Cubesats and NanoSats for Remote Sensing’, ed. T. S. Pagano, Proc. of SPIE , Vol. 9978, doi:10.1117/12.2238332.
Lunar and Martian dust: Evaluation and mitigation, M. Hyatt, P. Greenberg, V. Pines, A. Chait, W. Farrell, et al., Conference Proc. From 45th Annual AIAA Aerospace Science Meeting, AIAA 2007-347, 2007

Mars Express MARSIS radar: A prediction of the effect of overlying ice on detecting polar basal lakes and interglacial aquifers, W. M. Farrell, J. J. Plaut, D. A. Gurnett, and G. Picardi, NASA/TM –2004-212749, 2004.

Exploiting crossed magnetic antennas in a natural waveguide, W. Farrell, M. Desch, M. Kaiser, and J. Houser, NASA Tech Briefs, GSC-13976, August, 1999.

The UAV: A unique platform for electrodynamic studies of upward lightning in the middle atmosphere, RA Goldberg, MD Desch, and WM Farrell, 13 ESA symposium on European Rocket and Balloon Programmes and Related Research, ESA Publication, 1997

Magnetic Antenna using metallic glass, W. M. Farrell, M. D. Desch, and J. G. Houser, NASA Tech Brief; 20, 50, 1996.

Pulsaur II: A sounding rocket project to study pulsating aurora and related phenomena, K. Maseide, F. Soraas, K. Aarsne, J. Bjordal, A. Coates, W. M. Farrell, T. A. Fritz, R. Pfaff, M. F. Smith, et al., Proceedings of the 12th ESA Symposium on European rocket and balloon programmes, ESA SP-370, 1995

Data compression for the Cassini radio and plasma wave experiment, W. M. Farrell, D. A. Gurnett, D. L. Kirchner, W. S. Kurth, and L. J. C. Woolliscroft, 1993 Space and Earth Science Data Compression Workshop, NASA Conference Publication 3183, p. 111, Snowbird, UT, 1993