

List of Refereed Publications
Lynn B. Wilson III

References

- [1] Wilson III, L. B., C. Cattell, P. J. Kellogg, K. Goetz, K. Kersten, L. Hanson, R. MacGregor, and J. C. Kasper (2007), Waves in Interplanetary Shocks: A Wind/WAVES Study, *Phys. Rev. Lett.*, **99**(4), 041101, [10.1103/PhysRevLett.99.041101](https://doi.org/10.1103/PhysRevLett.99.041101).
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- [31] Osmane, A., L. B. Wilson III, L. Blum, and T. I. Pulkkinen (2016), On the Connection between Microbursts and Nonlinear Electronic Structures in Planetary Radiation Belts, *Astrophys. J.*, **816**(2), 51–60, [10.3847/0004-637X/816/2/51](https://doi.org/10.3847/0004-637X/816/2/51).
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- [41] Horaites, K., S. Boldyrev, L. B. Wilson III, A. F. Viñas, and J. Merka (2018), Kinetic Theory and Fast Wind Observations of the Electron Strahl, *Mon. Not. Roy. Astron. Soc.*, **474**(1), 115–127, [10.1093/mnras/stx2555](https://doi.org/10.1093/mnras/stx2555).
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List of Non-refereed Talks/Presentations
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- [74] Breneman, A., Cattell, C., Wygant, J., Kersten, K., Wilson III, L. B., Kellogg, P. J., Goetz, K. & Schreiner, S. Large Amplitude Transmitter- and Lightning-Associated

List of Non-refereed Talks/Presentations
Lynn B. Wilson III

- Whistler Waves in Earth's Inner Plasmasphere at $L < 2$ (2011). Chapman Conference: Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, July 17-22, 2011.
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- [90] Tang, X., Cattell, C. A. & Wilson III, L. B. THEMIS observations of the magnetopause electron diffusion region and magnetospheric separatrix: Large amplitude waves and heated particles. *AGU Fall Meeting Abstracts* SM11B-2078 (2013). Dec. 9-13, 2013, San Francisco, CA.
- [91] Wilson III, L. B., Sibeck, D. G., Breneman, A. W., Le Contel, O., Cully, C. M., Turner, D. L., Angelopoulos, V. & Malaspina, D. M. Quantified Energy Dissipation Rates in the Terrestrial Bow Shock. *AGU Fall Meeting Abstracts* SM31A-2107 (2013). Dec. 9-13, 2013, San Francisco, CA.
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- [93] Wilson III, L. B., Sibeck, D. G., Breneman, A. W., Le Contel, O., Cully, C., Turner, D. L., Angelopoulos, V. & Malaspina, D. M. Quantified Energy Dissipation Rates in the Terrestrial Bow Shock. *2014 SHINE Conference* (2014). URL <http://shinecon.org/shine2014/abstractlisting.php>. June 23rd- 27th, 2014, Telluride, CO.
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- [96] Breneman, A. W., Cattell, C. A., Kersten, K., Paradise, A., Schreiner, S., Kellogg, P. J., Goetz, K. & Wilson III, L. B. STEREO and wind observations of intense electron cyclotron harmonic waves at the Earth's bow shock and inside the magnetosheath. *Union Radio-Scientifique Internationale General Assembly 1* (2014). 2014 XXXIth URSI, Aug. 16-23, 2014, Beijing, China.
- [97] Kempf, Y., Gutynska, O., Pokhotelov, D., Wilson III, L. B., Walsh, B. M., von Alfthan, S., Sibeck, D. G. & Palmroth, M. Ion distributions in the Earth's foreshock region: hybrid-Vlasov simulations and spacecraft observations. *Union Radio-Scientifique Internationale General Assembly 1* (2014). 2014 XXXIth URSI, Aug. 16-23, 2014, Beijing, China.
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- [100] Tang, X., Cattell, C. A., Wilson III, L. B. & Alexander, R. J. First simultaneous observations of lower hybrid, whistler mode, electrostatic solitary and electron cyclotron waves near the Earth's magnetopause. *AGU Fall Meeting Abstracts SM41A-4224* (2014). Dec. 15-19, 2014, San Francisco, CA.
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- [108] Osmane, A., Wilson III, L. B., Blum, L. & Pulkkinen, T. I. On the connection between large-amplitude whistlers, microbursts and nonlinear kinetic structures in the Earth's Radiation Belt. *AGU Fall Meeting Abstracts* SM21B-2527 (2015). Dec. 14-18, 2015, San Francisco, CA.
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- [110] Goncharov, O., Němeček, Z., Šafránková, J., Přech, L., Koval, A., Wilson III, L. B. & Zastenker, G. N. Waves associated with interplanetary shocks: Types and properties. In *EGU General Assembly Conference Abstracts*, vol. 18 of *EGU General Assembly*

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- [111] Koval, A., Wilson III, L. B., Szabo, A., Kasper, J. C., Stevens, M., Case, A. & Biesecker, D. DSCOVR Observations of Waves at Interplanetary Shocks. In *EGU General Assembly Conference Abstracts*, vol. 18 of *EGU General Assembly Conference Abstracts*, 11410 (2016). URL <http://meetingorganizer.copernicus.org/EGU2016/EGU2016-11410.pdf>. April 17–22, 2016, Vienna, Austria.
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- [114] Malaspina, D. M. & Wilson III, L. B. The Wind Dust Database: 22 Years Of Interplanetary And Interstellar Dust Observations at 1 AU. *Dusty Visions Workshop* (2016). URL <http://impact.colorado.edu/DustyVisions2016.html>. July 22–24, 2016, Boulder, CO.
- [115] Markevitch, M., Wilson III, L. B. *et al.* Microphysics of intracluster plasma with high-resolution X-ray spectroscopy. In *41st COSPAR Scientific Assembly*, vol. 41 of *COSPAR* (2016). URL <https://www.cospar-assembly.org>. July 30 – August 7, 2016, Istanbul, Turkey.
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- [118] Alterman, B. L., Stevens, M., Kasper, J. C., Koval, A. & Wilson III, L. B. Alfvénicity of Ion Drifts at 1AU. *AGU Fall Meeting Abstracts* SH51D–2611 (2016). Dec. 12–16, 2016, San Francisco, CA.
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- [121] Randol, B. M., Christian, E. R. & Wilson III, L. B. Observations of thermal and suprathermal tail ions from WIND. *AGU Fall Meeting Abstracts* SH13D-06 (2016). Dec. 12-16, 2016, San Francisco, CA.
- [122] Wang, S., Chen, L.-J., Hesse, M., Wilson III, L. B., Bessho, N., Gershman, D. J., Dorelli, J., Giles, B. L., Torbert, R. B., Pollock, C. J., Strangeway, R., Ergun, R., Burch, J. L., Avanov, L. A., Lavraud, B., Moore, T. E. & Saito, Y. Effects of Lower-hybrid Waves on Electron And Ion Heating During Asymmetric Reconnection. *AGU Fall Meeting Abstracts* SM31C-04 (2016). Dec. 12-16, 2016, San Francisco, CA.
- [123] Wilson III, L. B., Sibeck, D. G., Turner, D. L., Osmane, A., Caprioli, D. & Angelopoulos, V. Relativistic electrons produced by transient ion foreshock phenomena. *AGU Fall Meeting Abstracts* SH21A-2504 (2016). Dec. 12-16, 2016, San Francisco, CA.
- [124] Turner, D. L., L. B. Wilson III, et al. (2017), A case study of a hot flow anomaly observed by MMS, *2017 Geospace Environment Modeling Workshop*, Jun. 18-23, 2017, Portsmouth, VA.
- [125] Horaites, K., S. Boldyrev, L. B. Wilson III, A. F. Viñas, and J. Merka (2017), Kinetic Theory and Fast Wind Observations of the Electron Strahl, in *APS Meeting Abstracts*, p. NP11.00162, Oct. 23-27, 2017, Milwaukee, WI.
- [126] Wilson III, L. B., A. Koval, A. Szabo, M. L. Stevens, J. C. Kasper, C. A. Cattell, and V. V. Krasnoselskikh (2017), The structure of low Mach number, low beta, quasi-perpendicular collisionless shocks, in *APS Meeting Abstracts*, p. GO6.00006, Oct. 23-27, 2017, Milwaukee, WI.
- [127] Adrian, M. L., O. C. St Cyr, L. B. Wilson III, C. Schiff, L. W. Sacks, D. J. Chai, S. Z. Queen, and J. E. Sedlak (2017), The Distribution of Interplanetary Dust Near 1-AU: An MMS Perspective, *AGU Fall Meeting Abstracts*, pp. SH51C-2515, Dec. 11-15, 2017, New Orleans, LA.
- [128] Chen, L.-J., L. B. Wilson III, S. Wang, N. Bessho, A. F. Viñas, H. Lai, C. T. Russell, S. J. Schwartz, M. Hesse, T. E. Moore, J. L. Burch, D. J. Gershman, B. L. Giles, R. B. Torbert, R. E. Ergun, J. Dorelli, R. J. Strangeway, W. R. Paterson, B. Lavraud, Y. V. Khotyaintsev, et al. (2017), Ion Thermalization and Electron Heating across Quasi-Perpendicular Shocks Observed by the MMS Mission, *AGU Fall Meeting Abstracts*, pp. SH53B-05, Dec. 11-15, 2017, New Orleans, LA.
- [129] Cohen, Z., A. W. Breneman, C. A. Cattell, L. Davis, P. Grul, K. Kersten, and L. B. Wilson III (2017), STEREO Observations of Waves in the Ramp Regions of Interplanetary Shocks, *AGU Fall Meeting Abstracts*, pp. SH53B-02, Dec. 11-15, 2017, New Orleans, LA.

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- [130] Giagkiozis, S., L. B. Wilson III, et al. (2017), Statistical Study of the Properties of Magnetosheath Lion Roars using MMS observations, *AGU Fall Meeting Abstracts*, pp. SM11A–2281, Dec. 11–15, 2017, New Orleans, LA.
- [131] Horaites, K., S. Boldyrev, L. B. Wilson III, A. F. Viñas, and J. Merka (2017), Kinetic Theory and Fast Wind Observations of the Electron Strahl, *AGU Fall Meeting Abstracts*, pp. SH33A–2765, Dec. 11–15, 2017, New Orleans, LA.
- [132] Jones Greeley, A. D., S. G. Kanekal, D. N. Baker, B. Klecker, W. Li, L. B. Wilson III, and Q. Schiller (2017), Quantifying the contribution of microburst precipitation to global electron loss, *AGU Fall Meeting Abstracts*, pp. SM43A–2699, Dec. 11–15, 2017, New Orleans, LA.
- [133] Koval, A., L. B. Wilson III, A. Szabo, M. L. Stevens, J. C. Kasper, and D. A. Biesecker (2017), Magnetosonic-whistler Precursor Waves at Quasi-perpendicular Interplanetary Shocks: DSCOVR and Wind observations, *AGU Fall Meeting Abstracts*, pp. SH51A–2476, Dec. 11–15, 2017, New Orleans, LA.
- [134] Liu, T. Z., S. Lu, V. Angelopoulos, H. Hietala, and L. B. Wilson III (2017), Fermi Acceleration of Electrons inside Foreshock Transient Cores, *AGU Fall Meeting Abstracts*, pp. SM11A–2275, Dec. 11–15, 2017, New Orleans, LA.
- [135] Osmane, A., L. B. Wilson III, D. L. Turner, , A. P. Dimmock, and T. I. Pulkkinen (2017), Subcritical Growth of Electron Phase-space Holes in Planetary Radiation Belts, *AGU Fall Meeting Abstracts*, pp. SM43F–04, Dec. 11–15, 2017, New Orleans, LA.
- [136] St Cyr, O. C., L. B. Wilson III, K. Rockcliffe, , A. Mills, T. Nieves-Chinchilla, M. L. Adrian, and D. M. Malaspina (2017), Investigations of Wind/WAVES Dust Impacts, *AGU Fall Meeting Abstracts*, pp. SH23D–2682, Dec. 11–15, 2017, New Orleans, LA.
- [137] Turner, D. L., L. B. Wilson III, S. J. Schwartz, T. Z. Liu, A. Osmane, J. F. Fennell, J. B. Blake, A. N. Jaynes, K. Goodrich, B. Mauk, D. J. Gershman, L. A. Avanov, R. J. Strangeway, R. B. Torbert, and J. L. Burch (2017), Characteristics of Energetic Particle Acceleration in Hot Flow Anomalies Observed by MMS, *AGU Fall Meeting Abstracts*, pp. SM11A–2276, Dec. 11–15, 2017, New Orleans, LA.
- [138] Wilson III, L. B., A. Koval, A. Szabo, M. L. Stevens, J. C. Kasper, C. A. Cattell, and V. V. Krasnoselskikh (2017), The structure of low Mach number, low beta, quasi-perpendicular shocks, *AGU Fall Meeting Abstracts*, pp. SH51A–2474, Dec. 11–15, 2017, New Orleans, LA.

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- [139] Wilson III, L. B., Cattell, C. A., Kellogg, P. J., Goetz, K., Kersten, K., Kasper, J. C., Szabo, A. & Wilber, M. Atypical Waves and Particle Heating at an Interplanetary Shock (2010). Heliophysics Science Seminar, NASA Goddard Space Flight Center, Apr. 1st, 2010.
- [140] Wilson III, L. B., Cattell, C. A., Kellogg, P. J., Goetz, K., Kersten, K., Kasper, J. C., Szabo, A. & Wilber, M. Atypical Waves and Particle Heating at an Interplanetary Shock (2010). Space Physics Seminar, University of California at Berkeley, Oct. 5th, 2010.
- [141] Cattell, C. A., Breneman, A. W., Kersten, K., Kellogg, P. J., Goetz, K., Wygant, J. R., Wilson III, L. B., Looper, M., Blake, J. B. & Roth, I. Large Amplitude Whistler Waves and Electron Energization in Earth's Radiation Belts (2011). Chapman Conference: Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, July 17-22, 2011.
- [142] Wilson III, L. B., Koval, A., Szabo, A., Cattell, C. A., Breneman, A., Goetz, K., Kellogg, P. J., Kersten, K., Kasper, J. C., Maruca, B. A. & Pulupa, M. Electromagnetic lower hybrid waves, whistler waves, and particle heating/acceleration at supercritical interplanetary shocks (2011). Space Physics Seminar, University of California at Berkeley, Jul. 18th, 2011.
- [143] Wilson III, L. B., Cattell, C. A., Kellogg, P. J., Wygant, J. R., Goetz, K., Breneman, A. & Kersten, K. The properties of large amplitude whistler mode waves in the magnetosphere: propagation and relationship with geomagnetic activity (2011). RBSP SGW, Applied Physics Laboratory, Oct. 21st, 2011.
- [144] Wilson III, L. B., Koval, A., Szabo, A., Breneman, A., Cattell, C. A., Goetz, K., Kellogg, P. J., Kersten, K., Kasper, J. C., Maruca, B. A. & Pulupa, M. Observations of Electromagnetic Whistler Precursors at Supercritical Interplanetary Shocks (2012). Space Physics Seminar, University of Minnesota, Mar. 7th, 2012.
- [145] Wilson III, L. B., Koval, A., Szabo, A., Breneman, A., Cattell, C. A., Goetz, K., Kellogg, P. J., Kersten, K., Kasper, J. C., Maruca, B. A. & Pulupa, M. Observations of Electromagnetic Whistler Precursors at Supercritical Interplanetary Shocks (2012). Space Physics Seminar, Dartmouth College, May 1st, 2012.
- [146] Russell, C. T., Jian, L. K., Wei, H., Wilson III, L. B., Omid, N., Szabo, A. & Luhmann, J. G. Long-Period Investigation of Ion Cyclotron Waves in the Solar Wind at 1 AU (Invited). *AOGS-AGU (WPGM) Joint Assembly* ST29-A015 (2012). URL <http://www.asiaoceania.org/society/index.asp>. August 13-17, 2012, Singapore.
- [147] Wilson III, L. B., Koval, A., Szabo, A., Breneman, A., Cattell, C. A., Goetz, K., Kellogg, P. J., Kersten, K., Kasper, J. C., Maruca, B. A. & Pulupa, M. Observations of Electromagnetic Whistler Precursors at Supercritical Interplanetary Shocks (2012). Space Physics Seminar, University of California at Los Angeles, Sept. 28th, 2012.
- [148] Wilson III, L. B., Sibeck, D. G., Breneman, A. W., Le Contel, O., Cully, C., Turner, D. L. & Angelopoulos, V. Quantified Energy Dissipation Rates in the Terrestrial Bow

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- Shock (invited) (2013). 8th European Workshop on Collisionless Shocks, Paris, France, June 5th, 2013.
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- [153] Wilson III, L. B., Breneman, A. W., Cattell, C. A., Goetz, K., Kellogg, P. J., Le Contel, O., Cully, C., Turner, D. L. & Malaspina, D. M. Wave activity within the ramp of collisionless shock waves: recent results (invited). *AOGS-AGU (WPGM) Joint Assembly* ST07-A001 (2014). URL <http://www.asiaoceania.org/aogs2014/>. July 28 - August 1, 2014, Sapporo, Japan.
- [154] Wilson III, L. B. Collisionless Shock Waves and Wave-Particle Interactions (plenary). *2014 LWS Science Meeting: Evolving Solar Activity and Its Influence on Space and Earth* (2014). URL <http://lws-sdo-workshops.org>. Nov. 2–6, 2014, Portland, Oregon.
- [155] Wilson III, L. B. Collisionless shocks in the interplanetary medium (lecture). *8th Korean Astrophysics Workshop on Astrophysics* (2014). URL <http://sirius.unist.ac.kr/kaw8/>. Nov. 10–13, 2014, Jeju Island, Korea.
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- [158] Turner, D. L., Liu, Z., Angelopoulos, V., Omid, N., Wilson III, L. B., Archer, M. O., Hietala, H. & Osmane, A. Pressure variations and particle acceleration associated with foreshock bubbles and hot flow anomalies (Invited). *AGU Fall Meeting Abstracts* SM52A-04 (2014). Dec. 15-19, 2014, San Francisco, CA.
- [159] Wilson III, L. B. Particle acceleration through wave-particle interactions (invited). *Accelerating Cosmic Ray Comprehension* (2015). URL <http://www.astro.princeton.edu/acrc15/>. Apr. 13–16, 2015, Princeton Center for Theoretical Physics, Princeton, NJ.
- [160] Turner, D. L., Archer, M. O., Hietala, H., Plaschke, F., Wilson III, L. B. & Omid, N. Do magnetospheric scientists take the magnetosheath for granted? (Invited). *Unsolved Problems of Magnetospheric Physics* (2015). URL <http://spacescience.org/upmpw/>. Sep. 6-12, 2015, Scarborough, UK.
- [161] Wilson III, L. B. Particle Acceleration through Wave-Particle Interactions (invited). *Unsolved Problems of Magnetospheric Physics* (2015). URL <http://spacescience.org/upmpw/>. Sep. 6-12, 2015, Scarborough, UK.
- [162] Wilson III, L. B. Energy dissipation at the terrestrial bow shock (invited). *Cluster 25th Workshop* (2015). URL http://caa.estec.esa.int/wksp/cluster_workshop25_main.xml. Oct. 12-15, 2015, Venice, Italy.
- [163] Wilson III, L. B. Energy dissipation at the terrestrial bow shock (invited) (2016). URL <http://lasp.colorado.edu/home/about/events/magnetosphere-seminars/>. Friends of the Magnetosphere (FOM) Seminar, Mar. 29, 2016, Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado Boulder.
- [164] Wilson III, L. B., Sibeck, D. G., Turner, D. L., Osmane, A., Caprioli, D. & Angelopoulos, V. Relativistic electrons produced by foreshock disturbances (invited) (2016). URL <http://lasp.colorado.edu/home/about/events/science-seminars/>. LASP Science Seminar, Mar. 31, 2016, Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado Boulder.
- [165] Wilson III, L. B., Sibeck, D. G., Turner, D. L., Osmane, A., Caprioli, D. & Angelopoulos, V. Relativistic electrons produced by foreshock disturbances (invited) (2016). URL <https://www.princeton.edu/astro/>. Astroplasmas Seminar, Apr. 15, 2016, Department of Astrophysical Sciences, Princeton University.
- [166] Turner, D. L., T. Z. Liu, L. B. Wilson III, H. Hietala, N. Omid, and V. Angelopoulos (2016), Transient ion foreshock phenomena on Earth's dayside (invited), *ISROSES-III Meeting*, Sep. 11–16, 2016, Golden Sands, Bulgaria.
- [167] Wilson III, L. B. Gradients as Antennas: A General Wave Source. *Van Allen Probes SWG Meeting* (2016). URL http://rbspgway.jhuapl.edu/general_meetings. Oct. 26–28, 2016, Applied Physics Laboratory, Johns Hopkins University, Laurel, MD.

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- [168] Wilson III, L. B. Unexpected Discovery in Shock Acceleration: Answers to a 60 Year Old Question. *“Science in 7” Presentations* (2016). Oct. 17, 2016, Goddard Space Flight Center, Invited Presentation for the Sciences and Exploration Directorate Executive Council.
- [169] Wilson III, L. B., Sibeck, D. G., Turner, D. L., Osmane, A., Caprioli, D. & Angelopoulos, V. Relativistic electrons produced by foreshock disturbances (invited). *4th Cluster THEMIS Workshop* (2016). URL http://themis.igpp.ucla.edu/events_Cluster_THEMIS2016.shtml. Nov. 7-12, 2016, Palm Springs, CA.
- [170] Wilson III, L. B. Heliophysics Data Production and Use. *Heliophysics Director’s Seminar* (2016). Nov. 18, 2016, Goddard Space Flight Center, Presentation for the Sciences and Exploration Directorate Director.
- [171] Wilson III, L. B. Unexpected Discovery in Shock Acceleration: Answers to a 60 Year Old Question. *SMD Monthly Status Review* (2016). Dec. 8, 2016, NASA Headquarters, Invited Presentation for the Science Mission Directorate.
- [172] Wilson III, L. B., Sibeck, D. G., Turner, D. L., Osmane, A., Caprioli, D. & Angelopoulos, V. Relativistic electrons produced by foreshock disturbances (invited). *10th International Nonlinear Wave and Chaos Workshop* **10** (2017). URL <http://workshops.agu.org/nonlinear-waves-chaos/welcome/>. Mar. 20–24, 2017, San Diego, CA.
- [173] Wilson III, L. B., D. G. Sibeck, D. L. Turner, A. Osmane, D. Caprioli, and V. Angelopoulos (2017), Relativistic electrons produced by foreshock disturbances observed upstream of the Earth’s bow shock (invited and highlighted by EGU), in *EGU General Assembly Conference Abstracts, EGU General Assembly Conference Abstracts*, vol. 19, p. 143, Apr. 23–28, 2017, Vienna, Austria.
- [174] Wilson III, L. B. (2017), Shock Acceleration: An Unexpected Discovery Addresses a ~60 Year Old Question, *Heliophysics Director’s Seminar*, Apr. 21, 2017, Goddard Space Flight Center, Presentation for the Sciences and Exploration Directorate Director.
- [175] Turner, D. L., S. J. Schwartz, L. B. Wilson III, A. Osmane, J. F. Fennell, J. B. Blake, A. N. Jaynes, I. Cohen, B. Mauk, D. J. Gershman, L. A. Avanov, B. L. Giles, K. Goodrich, R. J. Strangeway, R. B. Torbert, and J. L. Burch (2017), Anatomy of Hot Flow Anomaly Shocks and Their Effectiveness for Energetic Particle Acceleration (invited), chapman Conference: Dayside Magnetosphere Interactions, July 10-14, 2017, Chengdu, Sichuan Province, China.
- [176] Wilson III, L. B. (2017), Relativistic electrons generated locally within transient ion foreshock phenomena, *University of Maryland Plasma Physics Seminar*, Sep. 27, 2017, University of Maryland Plasma Physics Seminar.
- [177] Chen, L.-J., S. Wang, L. B. Wilson III, S. J. Schwartz, N. Bessho, A. Le, et al. (2017), Plasma heating across quasi-perpendicular shocks observed by the MMS mission, in *APS Meeting Abstracts*, p. UM9.00004, oct. 23–27, 2017, Milwaukee, WI.

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- [178] Wilson III, L. B. (2017), Electron acceleration by whistler waves at collisionless shocks, *2017 JSI Workshop*, Nov. 6–9, 2017, Cosmic Accelerators: Understanding Nature’s High-energy Particles and Radiation.
- [179] Wilson III, L. B., D. G. Sibeck, D. L. Turner, A. Osmane, D. Caprioli, and V. Angelopoulos (2017), Relativistic electrons produced by foreshock disturbances observed upstream of the Earth’s bow shock (invited), *The Magnetosphere New Tools, New Thinking, New Results*, Nov. 12–17, 2017, Puerto Varas, Chile.
- [180] Liu, T. Z., V. Angelopoulos, H. Hietala, S. Lu, and L. B. Wilson III (2017), Understanding of Particle Acceleration by Foreshock Transients (invited), *AGU Fall Meeting Abstracts*, pp. U22B–06, Dec. 11–15, 2017, New Orleans, LA.
- [181] Wilson III, L. B., D. G. Sibeck, D. L. Turner, A. Osmane, D. Caprioli, and V. Angelopoulos (2017), Relativistic electrons generated locally within transient ion foreshock phenomena (invited), *AGU Fall Meeting Abstracts*, pp. SM24A–01, Dec. 11–15, 2017, New Orleans, LA.
- [182] Wilson III, L. B., A. Koval, A. Szabo, M. L. Stevens, J. C. Kasper, C. A. Cattell, and V. V. Krasnoselskikh (2018), The structure of low Mach number, low beta, quasi-perpendicular shocks (invited), *Fundamental Physical Processes in Solar-Terrestrial Research and Their Relevance to Planetary Physics*, Jan. 7–13, 2018, Kona, Hawaii.