Zoltan Sternovsky
Curriculum Vita

Laboratory for Atmospheric and Space Physics
University of Colorado
1234 Innovation Drv.
Boulder, CO 80303
Cell: 303 819 2783
Email: Zoltan.Sternovsky@colorado.edu

Smead Aerospace Engineering Sciences
University of Colorado
Boulder, CO 80309-0429
ECOT 538

Education

Ph.D., Charles University, Prague, Czech Republic, Physics, **2001**
Dissertation Title: Elementary processes in dusty plasmas
M.S., Charles University, Prague, Czech Republic, Physics, **1998**

Professional Experience

Associate Professor, 4/2016 – present
LASP, University of Colorado, Boulder, CO &
Smead Aerospace Engineering Sciences, University of Colorado, Boulder CO
Assistant Professor, 8/2009 – 4/2016
LASP, University of Colorado, Boulder, CO &
Smead Aerospace Engineering Sciences, University of Colorado, Boulder CO
Research Scientist, 1/2005 – present
LASP, University of Colorado, Boulder, CO
Research Associate (postdoc), 3/2002 – 12/2004
Physics Dept., University of Colorado, Boulder, CO
Research Assistant, 1/1999 – 3/2002
Physics Dept., University of Colorado, Boulder, CO
Graduate Research Assistant, 9/1998 – 1/1999
Charles University, Prague, Czech Rep.

Honors and Awards

Young Scientist Award, Union of Pure and Applied Physics (IUPAP), "…pioneering contribution to the study of charged dust particle dynamics in laboratory and space plasmas," 2011.

Promotion to Associate Professor, Smead Aerospace Engineering Sciences Department, University of Colorado, April, 2016

Outstanding Junior Faculty in Aerospace Engineering Sciences, University of Colorado, 2016.

Professional Organizations

American Physical Society (APS)
American Geophysical Union (AGU)

Peer-Reviewed Journal Articles*

1. L. Nouzák, **Z. Sternovsky**, M. Horányi, S. Hsu, J. Pavlů, M.-H. Shen, S.-Y. Ye, Magnetic field effect on antenna signals induced by dust particle impacts, *J. Geophys. Res.* 125, https://doi.org/10.1029/2019JA027245 (2020).

2. Ingrid Mann, Libor Nouzák, Jakub Vaverka, Tarjei Antonsen, Åshild Fredriksen, Karine Issautier, David Malaspina, Nicole Meyer-Verne, Jiří Pavlů, **Zoltan Sternovsky**, Joan Stude, Shengyi Ye, Arnaud Zaslavsky, Dust observations with antenna measurements and its prospects for observations with Parker Solar Probe and Solar Orbiter., *Annales Geophysicae*, *37*(6), 1121–1140. http://doi.org/10.5194/angeo-37-1121 (2019).

3. S. -Y. Ye, J. Vaverka, L. Nouzak, **Z. Sternovsky**, A. Zaslavsky, I. Mann, H.-W. Hsu, T. F. Averkamp, A. H. Sulaiman, D. Pisa, J. Pavlu, G. B. Hospodarsky, W. S. Kurth, M. Horanyi, Understanding Cassini RPWS Antenna Signals triggered by dust impacts, *Geophys. Res. Lett.*, *46*(20), 10941–10950. http://doi.org/10.1029/2019GL084150 (2019).

4. Barrie, A. C., F. Cipriani, C. P. Escoubet, S. Toledo-Redondo, R. Nakamura, K. Torkar, **Z. Sternovsky**, S. Elkington, D. Gershman, B. Giles, and C. Schiff, Characterizing Spacecraft Potential Effects on Measured Particle Trajectories, *Phys. Plasmas*, *26*(10), 103504–13. http://doi.org/10.1063/1.5119344 (2019).

5. M. DeLuca, Z. **Sternovsky** (2019). High-Speed Drag Measurements of Aluminum Particles in Free Molecular Flow. *Journal of Geophysical Research: Space Physics*, *4*(2), 178–9. http://doi.org/10.1029/2019JA026583

6. Cohen, B. A., Szalay, J. R., Rivkin, A. S., Richardson, J. A., Klima, R. L., Ernst, C. M., Chabot, N. L., **Sternovsky**, Z., Horanyi, M. (2019). Using dust shed from asteroids as microsamples to link remote measurements with meteorite classes. *Meteoritics & Planetary Science*, *448*, 243–21. http://doi.org/10.1111/maps.13348

7. N. Swarnalingam, D. Janches, J. D. Carrillo-Sanchez, P. Pokorny, J. Plane, **Z. Sternovsky**, and D. Nesvorny, Modeling the Altitude Distribution of Meteor Head Echoes Observed with HPLA Radars - Implications on the Radar Detectability of Meteoroid Populations, *Astronom. J.*, *157*(5), 179. http://doi.org/10.3847/1538-3881/ab0ec6 (2019).

8. J. R. Szalay, P. Pokorný, **Z. Sternovsky**, Z. Kupihar, A. R. Poppe, M. Horányi, Impact Ejecta and Gardening in the Lunar Polar Regions. *Journal of Geophysical Research: Planets*, *124*(1), 143–154. http://doi.org/10.1029/2018JE005756 (2019).

9. A. C. Barrie, S. Elkington, **Z. Sternovsky**, D. Smith, B. Giles, and C. Schiff, Wavelet Compression Performance of MMS/FPI Plasma Count Data. *Earth and Space Science*, 2018EA000430–20. http://doi.org/10.1029/2018EA000430 (2019).

10. A. Gemer, **Z. Sternovsky**, D. James, M. Horanyi, The effect of high-velocity dust particle impacts on microchannel plate (MCP) detectors, *Planet. Space Sci.*, *in press* (2019).

* Underlined names indicate student first authors.

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15. Li, Y., Bugiel, S., Strack, H., Simolka, J., **Sternovsky, Z**., Kempf, S., M. Horanyi, E. Grün, X. Li, R. Srama (2018). Determination of impact position on an impact ionization detector by electrostatic induction. *Advances in Space Research*, *62*(4), 890–895. http://doi.org/10.1016/j.asr.2018.05.026

16. L. Nouzák, S. Hsu, D. Malaspina, F. M. Thayer, S.-Y. Ye, J. Pavlu, Z. Nemeček, J. Šafránková, **Z. Sternovsky,** Laboratory modeling of dust impact detection by the Cassini spacecraft. *Planetary and Space Science*, *156*, 85–91. http://doi.org/10.1016/j.pss.2017.11.014 (2018).

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51. J. Xie,[†] **Z. Sternovsky**, E. Grün, S. Auer, N. Duncan, K. Drake, H. Le, M. Horanyi, and R. Srama, Dust Trajectory Sensor: Accuracy and data analysis, Rev. Sci. Instrum. 82, 105104 (2011).

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[†] Student as first author.

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