

## Publications of V. S. Semenov 2017-2021

1. Kiehas, S.A., N.N. Volkonskaya, V.S. Semenov, N.V. Erkaev, I.V. Kubyshkin, I.V. Zaitsev, Large-scale energy budget of impulsive magnetic reconnection: Theory and simulation, *J. Geophys. Res. Space Physics*, Vol.122, 3212–3231, doi:10.1002/2016JA023169, 2017
2. Dyadechkin, S., V. S. Semenov, E. Kallio, N. V. Erkaev, M. Alho, and H. Lammer, Global kinetic hybrid simulation for radially expanding solar wind, *J. Geophys. Res. Space Physics*, Vol.122, 7854–7864, doi:10.1002/2017JA023992, 2017
3. Samsonov, A. A., Sibeck, D. G., Dmitrieva, N. P., & Semenov, V. S. , What happens before a southward IMF turning reaches the magnetopause? *Geophysical Research Letters*, 44, 9159–9166, 2017
4. Korovinskiy, D. B., Kubyshkina, D. I., Semenov, V. S., Kubyshkina, M. V., Erkaev, N. V., and Kiehas, S. A., On application of asymmetric Kan-like exact equilibria to the Earth magnetotail modeling, *Ann. Geophys.*, 36, 641-653, 2018
5. M. Kubyshkina, V. Semenov, N. Erkaev, E. Gordeev, S. Dubyagin, N. Ganushkina, and M. Shukhtina, Relations between  $v_z$  and  $B_x$  components in solar wind and their effect on substorm onset, *Geophys. Res. Lett.*, 45, doi:10.1002/2017GL076268, 2018
6. D. B. Korovinskiy, N. V. Erkaev, V. S. Semenov, I. B. Ivanov, S. A. Kiehas, and I. I. Ryzhkov, On the influence of the local maxima of total pressure on the current sheet stability to the kink-like (flapping) mode, *Physics of Plasmas* 25, 022904, doi.org/10.1063/1.5016934, 2018
7. Samsonov, A. A., Sibeck, D. G., Dmitrieva, N. P., Semenov, V. S., Slivka, K. Y., Safrankova, J., and Z. Nemecek, Magnetosheath propagation time of solar wind directional discontinuities, *Journal of Geophysical Research: Space Physics*, Vol. 123, doi.org/10.1029/2017JA025174, 2018
8. D. B. Korovinskiy, V. S. Semenov, N. V. Erkaev, I. B. Ivanov, and S. A. Kiehas, Current sheet bending as destabilizing factor in magnetotail dynamics, *Physics of Plasmas* 25, 092901, doi: 10.1063/1.5046175, 2018
9. D. B. Korovinskiy, A. V. Divin, V. S. Semenov, N. V. Erkaev, I. B. Ivanov, S. A. Kiehas, and S. Markidis, The transition from “double-gradient” to ballooning unstable mode in bent magnetotail-like current sheet, *Physics of Plasmas* 26, 102901, DOI: 10.1063/1.5119096, 2019
10. A. Divin, V. Semenov, I. Zaitsev, D. Korovinskiy, J. Deca, G. Lapenta, V. Olshevsky, and S. Markidis , Inner and outer electron diffusion region of antiparallel collisionless reconnection: Density dependence, *Physics of Plasmas* 26, 102305, DOI: 10.1063/1.5109368, 2019
11. D. B. Korovinskiy, A. V. Divin, V. S. Semenov, N. V. Erkaev, S. A. Kiehas, I. V. Kubyshkin, On the source region and orientations of nightside auroral arcs, *Journal of Atmospheric and Solar-Terrestrial Physics*. 204, 105288., DOI: 10.1016/j.jastp.2020.105288