

EFW, refereed publications 2016

Allen, R. C., J.-C. Zhang, L. M. Kistler, H. E. Spence, R.-L. Lin, B. Klecker, M. W. Dunlop, **M. André** and V. K. Jordanova, A statistical study of EMIC waves observed by Cluster: 2. Associated plasma conditions, *J. Geophys. Res. Space Phys.*, 121, 6458–6479, doi:10.1002/2016JA022541, 2016.

Bale, S. D., and 83 co-authors, including **M. André and A. Vaivads**, The FIELDS instrument suite for Solar Probe Plus. Measuring the Coronal plasma and magnetic field, plasma waves and turbulence, and radio signatures of solar transients, *Space Sci Rev*, 204, 49. doi:10.1007/s11214-016-0244-5, 2016.

Breuillard, H., E. Yordanova, A. Vaivads, and O. Alexandrova, The effects of kinetic instabilities on small-scale turbulence in Earth's magnetosheath, *Astrophys. J.*, 829, 54, doi: 10.3847/0004-637X/829/1/54, 2016.

Cerri, S.S.F. Califano, F. Jenko, D. Told, and F. Rincon, Subproton-scale cascades in solar wind turbulence: driven hybrid-kinetic simulations, *ApJ. Lett.*, 822, L12, doi:10.3847/2041-8205/822/1/L12, 2016

Fu, H. S., J. B. Cao, **A. Vaivads, Y. V. Khotyaintsev, M. André**, M. Dunlop, W. L. Liu, H. Y. Lu, S. Y. Huang, Y. D. Ma and **E. Eriksson**, Identifying magnetic reconnection events using the FOTE method, *J. Geophys. Res., Space Physics*, 121, 1263-1272, doi: 10.1002/2015JA021701, 2016.

Graham, D. B., A. Vaivads, Yu. V. Khotyaintsev, and M. André. Whistler emission in the separatrix regions of asymmetric magnetic reconnection, *J. Geophys. Res., Space Physics*, 121, 1934-1954, doi: 10.1002/2015JA021239, 2016.

Graham, D. B., Yu. V. Khotyaintsev, A. Vaivads and M. André, Electrostatic solitary waves and electrostatic waves at the magnetopause, *J. Geophys. Res., Space Physics*, 121, 3069-3092, doi: 10.1002/2015JA021527, 2016.

Grison, B., F. Darrouzet, O. Santolík, N. Cornilleau-Wehrlin, and A. Masson, Cluster observations of reflected EMIC triggered emission, *Geophys. Res. Lett.*, 43, 4164-4171, doi:10.1002/2016GL069096, 2016.

Guo, R., Z. Pu, L.-J. Chen, S. Fu , L. Xie, X. Wang, M. Dunlop, Y.V. Bogdanova, Z. Yao, C. Xiao, J. He, A.N. Fazakerley, In-situ observations of flux ropes formed in association with a pair of spiral nulls in magnetotail plasmas, *Phys. Plasmas*, 23, 052901, doi: 10.1063/1.4948415, 2016.

Guo, R., Z.Pu, S. Fu, S., L. Xie, M. Dunlop, Y.V. Bogdanova, J. He, X. Wang, Z. Yao, Evolution of clustered magnetic nulls in a turbulent-like reconnection region in the magnetotail, *Sci. Bull.*, 61, 1145-1150, doi:10.1007/s11434-016-1121-z, 2016.

Huang, S. Y., H. S. Fu, Z. G. Yuan, **A. Vaivads, Y. V. Khotyaintsev**, A. Retino, M. Zhou, **D. B. Graham**, K. Fujimoto, F. Sahraoui, X. H. Deng, B. Ni, Y. Pang, S. Fu, D. D. Wang and X. Zhou, Two types of whistler waves in the hall reconnection region,

Geophys. Res. Lett., 43, 6639-6646, doi: 10.1002/2016JA022650, 2016.

Huang, S. Y., A. Retino, T. D. Phan, W. Daughton, **A. Vaivads**, H. Karimabadi, M. Zhou, F. Sahraoui, G. L. Li, Z. G. Yuan, X. H. Deng, H. S. Fu, S. Fu, Y. Pang and D. D. Wang, In situ observations of flux rope at the separatrix region of magnetic reconnection, *J. Geophys. Res. Space Physics*, 121, 205–213, doi:10.1002/2015JA021468, 2016.

Hull, A.J., C.C. Chaston, H.U. Frey, M.O. Fillingim, M.L. Goldstein, J.W. Bonnell, and F.S. Mozer, The ‘Alfvénic surge’ at substorm onset/expansion and the formation of ‘Inverted-Vs’: Cluster and IMAGE observations, *J. Geophys. Res. Space Physics*, 121, 3978-4004, doi:10.1002/2015JA022000, 2016.

Johlander, A., A. Vaivads, Yu. V. Khotyaintsev, A. Retinò and I Dandouras, Ion injection at quasi-parallel shocks seen by the Cluster spacecraft, *ApJL*, 817:L4, doi:10.3847/2041-8205/817/1/L4, 2016.

Kakad, A., B. Kakad, C. Anekallu, G. Lakhina, Y. Omura, and A. Fazakerley, Slow electrostatic solitary waves in Earth's plasma sheet boundary layer, *J. Geophys. Res. Space Physics*, 121, 4452-4465, doi:10.1002/2016JA022365, 2016.

Mishin, E.V., SAPS onset timing during substorms and the westward traveling surge, *Geophys. Res. Lett.*, 43, 6687–6693, doi:10.1002/2016GL069693, 2016.

Mozer, F.S., DC and low-frequency double probe electric field measurements in space, *J. Geophys. Res. Space Physics*, 121, 10492-10953, doi:10.1002/2016JA022952, 2016.

Nakamura, T.K.M., R. Nakamura, R., H. Hasegawa, Spatial dimensions of the electron diffusion region in anti-parallel magnetic reconnection, *Ann. Geophys.*, 34, 357-367, doi:10.5194/angeo-34-357-2016, 2016.

Soucek, J., L. Åhlén, S. bale, J. Bonnell, N. Boudin, D. Brienza, C. Carr, F. Cipriani, C. P. Escoubet, A. Fazakerley, M. Gehler, V. genot, A. Hilgers, B. Hanock, G. Jannet, A. Junge, **Y. Khotyaintsev**, J. De Keyser, H. Kucharek, R. Lan, B. Lavraud, F. Leblanc, W. Magnes, M. Mansour, M. F. Marcucci, R. Nakamura, Z. Nemecek, C. Owen, Y. Phal, A. Retino, D. Rodgers, J. Safrankova, F. Sahraoui, R. Vainio, R. Wimmer-Schweingruber, J. Steinhagen, **A. Vaivads**, A. Wielders and A. Zaslavsky, EMC Aspects of Turbulence Heating ObserveR (THOR) Spacecraft, *ESA-SP*, 738, 18, ISBN: 978-92-9221-303-9, 2016.

Toledo-Redondo, S., M. André, A. Vaivads, Yu. V. Khotyaintsev, B. Lavraud, **D. B. Graham, A. Divin** and N. Aunai, [Cold ion heating at the dayside magnetopause during magnetic reconnection](#), *Geophys. Res. Lett.*, 43, 58-66, doi: 10.1002/2015GL067187, 2016.

Tyler, E., C. Cattell, S. Thaller, J. Wygant, C. Gurgiolo, M. Goldstein and C. Mouikis, Partitioning of integrated energy fluxes in four tail reconnection events observed by Cluster, *J. Geophys. Res.*, 121, doi:10.1002/2016JA023330, 2016.
(online 16 November 2016)

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← [**Vaivads, A.**](#), [A. Retinò, J. Soucek, Yu. V. Khotyaintsev, F. Valentini, C. P. Escoubet, O. Alexandrova, M. André, S. D. Bale, M. Balikhin, D. Burgess, E. Camporeale, D. Caprioli, C. H. K. Chen, E. Clacey, C. M. Cully, J. De Keyser, J. P. Eastwood, A. N. Fazakerley, S. Eriksson, M. L. Goldstein, D. B. Graham, S. Haaland, M. Hoshino, H. Ji, H. Karimabadi, H. Kucharek, B. Lavraud, F. Marcucci, W. H. Matthaeus, T. E. Moore, R. Nakamura, Y. Narita, Z. Nemecek, C. Norgren, H. Opgenoorth, M. Palmroth, D. Perrone, J.-L. Pinçon, P. Rathsman, H. Rothkaehl, F. Sahraoui, S. Servidio, L. Sorriso-Valvo, R. Vainio, Z. Vörös, R. F. Wimmer-Schweingruber, Turbulence Heating ObserveR – satellite mission proposal](#), *J. Plasma Phys.* 82, doi:<https://doi.org/10.1017/S0022377816000775>, 2016.

Vörös, Z., [**E. Yordanova**](#), M. M. Echim, G. Consolini, and Y. Narita, Turbulence-generated proton-scale structures in the Terrestrial magnetosheath, *ApJL*, 819, L15, doi: 10.3847/2041-8205/819/1/L15, 2016.

Walker S.N., A.G. Demekhov, S.A. Boardsen, N.Y. Ganushkina, D.G. Sibeck, and M.A. Balikhin, Cluster observations of non-time-continuous magnetosonic waves, *J. Geophys. Res.*, 121, 9701-9716, doi:10.1002/2016JA023287, 2016.

Wang, R., Q. Lu, R. Nakamura, C. Huang, A. Du, F. Guo, W. Teh, M. Wu, S. Lu, S. Wang, Coalescence of magnetic flux ropes in the ion diffusion region of magnetic reconnection, *Nature Phys.*, 12, 263-267, 2016

Wang, R., Q. Lu, R. Nakamura, C. Huang, X. Li, M. Wu, A. Du, X. Gao, and S. Wang, Electrostatic and electromagnetic fluctuations detected inside magnetic flux ropes during magnetic reconnection, *J. Geophys. Res. Space Physics*, 121, 9473-9482, doi:10.1002/2016JA022906, 2016.

Wang, T., J. Cao, H. Fu, X. Meng, and M. Dunlop (2016), Compressible turbulence with slow mode waves observed in the bursty bulk flow of plasma sheet, *Geophys. Res. Lett.*, 43, 1854-1861, doi:10.1002/2016GL068147, 2016.

Xiong, Y., Yuan, Z., and Wang, J., Energetic ions scattered into the loss cone with observations of the Cluster satellite, *Ann. Geophys.*, 34, 249-257, doi:10.5194/angeo-34-249-2016, 2016.

Zhao, Y., R. Wang, Q. Lu, A. Du, Z. Yao, and M. Wu, Coalescence of magnetic flux ropes observed in the tailward high-speed flows, *J. Geophys. Res. Space Physics*, 121, 10,898–10,909, doi:10.1002/2016JA023526, 2016.

Zhou, M., T. Li, X. Deng, Y. Pang, X. Xu, R. Tang, S. Huang, and H. Li, Statistics of Energetic Electrons in the Magnetotail Reconnection, *J. Geophys. Res. Space Physics*, 120, 3108–3119, doi: 10.1002/2015JA022085, 2016.

Licentiate theses

Eriksson, Elin, 3D magnetic nulls and regions of strong current in the Earth's magnetosphere, *Licentiate thesis*, Department of physics and astronomy, Uppsala university, 2016.

Johlander, Andreas, Ion dynamics and structure of collisionless shocks, *Licentiate thesis*, Department of physics and astronomy, Uppsala university, 2016.