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Publication list

All manuscripts are available on the webpage

https://ecamporeale.github.io/publications.html

Under review or in preparation

1. **Camporeale, E.,** Cash, M. D., Singer, H. J., Balch, C. C., Huang, Z., & Toth, G. (2019). A gray-box model for a probabilistic estimate of regional ground magnetic perturbations: Enhancing the NOAA operational Geospace model with machine learning., *under review,* https://arxiv.org/abs/1912.01038
2. R. Sharma et al. &, **E. Camporeale**, Bayesian inference of quasi-linear radial diffusion parameters using Van Allen Probes, *under review*, https://arxiv.org/abs/2002.02832
3. **E. Camporeale,** Accurate and Calibrated Parametric Model for Variance Estimation, https://homepages.cwi.nl/~camporea/papers/camporeale_nips_2018.pdf

Published or Accepted for publication

1. Chandorkar, M., Furtlehner, C., Poduval, B., **Camporeale, E.**, & Sebag M. (2020) Dynamic Time Lag Regression: Predicting What & When. *ICLR-2020.* https://hal.inria.fr/hal-02422148/
2. Pezzi, O., Cozzani, G., Califano, F., Valentini, F., Guarrasi, M., **Camporeale, E**., & Veltri, P. (2019). ViDA: a Vlasov-DArwin solver for plasma physics at electron scales. *Journal of Plasma Physics, 85,5* https://doi.org/10.1017/S0022377819000631
3. **Camporeale, E.** (2019). The challenge of machine learning in space weather nowcasting and forecasting. *Reviews of Geophysics*, *Grand Challenges in the Earth and Space Sciences* https://doi.org/10.1029/2018SW002061
4. **Camporeale, E.**, Chu, X., Agapitov, O. V., & Bortnik, J. (2019). On the generation of probabilistic forecasts from deterministic models. *Space Weather*, 17(3), 455-475 https://doi.org/10.1029/2018SW002026
5. Pezzi, O., Valentini, F., Servidio, S., **Camporeale, E.**, & Veltri, P. (2019) Fourier–Hermite decomposition of the collisional Vlasov–Maxwell system: implications for the velocity-space cascade. *Plasma Physics and Controlled Fusion*, 61(5), 054005. https://iopscience.iop.org/article/10.1088/1361-6587/ab04d5/meta

6. M. Gruet, M. Chandorkar, A. Sicard, **E. Camporeale** (2018)
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   Phys. Rev. Lett.,120 125101 **(article featured in issue cover)**
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   J. Geophys. Res. 122, 10,910–10,920
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13. **E. Camporeale** and D. Burgess (2017)
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15. S. Wing, J. Johnson, **E. Camporeale**, and G. Reeves (2016)
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28. W. Tu, G. S. Cunningham, Y. Chen, M. G. Henderson, **E. Camporeale**, and G. D. Reeves (2013) Modeling the radiation belt electron dynamics during GEM challenge intervals with DREAM 3D diffusion model
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42. A. Carè and **E. Camporeale** (2018)
    Regression, *in Machine Learning Techniques for Space Weather (eds. Camporeale, Wing, Johnson)*
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43. S. Wing, J. Johnson, **E. Camporeale**, and G. Reeves (2018)
    Untangling the solar wind drivers of radiation belt: an information theoretical approach, *in Machine Learning Techniques for Space Weather (eds. Camporeale, Wing, Johnson)*
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46. S. Markidis, **E. Camporeale**, D. Burgess, Rizwan-uddin, G. Lapenta (2009) Parsek2D: An Implicit Parallel Particle-in-Cell Code *Numerical Modeling of Space Plasma Flows: ASTRONUM – 2008* http://adsabs.harvard.edu/full/2009ASPC..406..237M

Books edited

1. **E. Camporeale,** S. Wing, J. Johnson (2018)
   Machine Learning techniques for Space Weather, *Elsevier*
   https://www.elsevier.com/books/machine-learning-techniques-for-space-weather/camporeale/978-0-12-811788-0

Meeting Reports

1. **E. Camporeale** & Scientific Organizing Committee of ML-Helio (2020)
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2. **E. Camporeale**, S. Wing, J. Johnson, C. Jackman, R. McGranaghan (2018)
   Space Weather in the Machine Learning era: a multi-disciplinary approach
   Space Weather, doi: 10.1002/2017SW001775
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3. **E. Camporeale**, S. Wing, J. Johnson (2018)
   Space Weather in the Machine Learning era
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Publication statistics (updated July 2018)

46 papers published (23 as first author)
More than 40 co-authors
List of journals:

- *Space Weather, Journal of Geophysical Research, Review of Geophysics, Astrophysical Journal, Geophysical Research Letter, Space Science Review, Annales Geophysicae;*
- *Physical Review Letter, Physics of Plasmas, Plasma Physics and Controlled Fusion, Plasma Sources Science and Technology, Journal of Plasma Physics, IEEE Transactions on Plasma*

Science;

- *Computer Physics Communication, Journal of Computational Physics, Geoscience Model Development;*
- *International Journal of Uncertainty Quantification.*