

## Publication list GREGORY G. HOWES

### PAPERS IN PREPARATION

1. Howes, G. G., Cowley, S. C., and Dorland, W.  
*Driving and Dissipation of Kinetic Astrophysical Turbulence*  
Comp. Phys. Comm., in preparation 2008.
2. Bale, S. D., Howes, G. G., Kasper, J. and Quataert, E.  
*Electron Temperature Anisotropies in the Solar Wind*  
Phys. Rev. Lett., in preparation 2008.
3. Howes, G. G., Tatsuno, T., and Dorland, W.  
*AstroGK: Astrophysical Gyrokinetics Code*  
J. Comp. Phys., in preparation 2008.

### SUBMITTED PAPERS

1. Howes, G. G.  
*Inertial Range Turbulence in Kinetic Plasmas*  
Phys. Plasmas, arXiv:0711.4358, submitted 2007.
2. Schekochihin, A. A., Cowley, S. C., Dorland, W., Hammett, G. W., Howes, G. G., Quataert, E., and Tatsuno, T.  
*Kinetic and Fluid Turbulent Cascades in Magnetized Weakly Collisional Astrophysical Plasmas*  
Astrophys. J. Supp., arXiv:0704.0044, submitted 2007.

### PUBLISHED/ACCEPTED PAPERS

1. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E., Schekochihin, A. A. and Tatsuno, T.  
*Nonlinear Simulations of Kinetic Turbulence in Astrophysical Plasmas*  
Phys. Rev. Lett., accepted 2008.
2. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E., and Schekochihin, A. A.  
*A Model of Turbulence in Magnetized Plasmas: Implications for the Dissipation Range in the Solar Wind*  
J. Geophys. Res., arXiv:0707.3147, accepted 2008.
3. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E., and Schekochihin, A. A.  
*Astrophysical Gyrokinetics: Basic Equations and Linear Theory*  
Astrophys. J. **651**, 590–614 (2006).
4. Maron, J. L. and Howes, G. G.  
*Gradient Particle Magnetohydrodynamics*  
Astrophys. J. **595**, 564–572 (2003).
5. Howes, G. G., Cowley, S. C., and McWilliams, J. C.  
*Local Buoyant Instability of Magnetized Shear Flows*  
Astrophys. J. **560**, 617–629 (2001).

### PEER-REVIEWED CONFERENCE PROCEEDINGS

1. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E., and Schekochihin, A. A.  
*Dissipation-scale turbulence in the solar wind*  
in Turbulence and Nonlinear Processes in Astrophysical Plasmas  
AIP Conference Proceedings **932**, 3–8 (2007).

## PHD THESIS

1. Howes, G. G.  
*Galactic Dynamics with Magnetic Fields*  
Ph.D. thesis, University of California, Los Angeles, (2004).

## PUBLISHED CONFERENCE ABSTRACTS

1. Wong, A. Y., Howes, G. G and Rosenthal, G.  
*Novel Small Scale Accelerator for Fusion Experiments*  
APS Meeting Abstracts, B1 (1998).
2. Howes, G. G., and Cowley, S.C.  
*Stability in a sheared flow*  
APS Meeting Abstracts, 1108P (1999).
3. Howes, G. G., and Cowley, S. C.  
*How Shear Flow Can Ruin Your Day!*  
APS Meeting Abstracts, 1047P (2000).
4. Maron, J. L., and Howes, G. G.  
*Gradient Particle Magnetohydrodynamics, the next generation SPH algorithm*  
Bulletin of the American Astronomical Society **33** 1483,(2001).
5. Howes, G. G., Maron, J. and Cowley, S.  
*Gradient Particle Magnetohydrodynamics: A new Lagrangian MHD code*  
APS Meeting Abstracts, 1080P, (2001).
6. Howes, G. G., and Cowley, S. C.  
*Global Galactic Disk Simulations Using High-Performance GPM*  
APS Meeting Abstracts, 1016P (2002).
7. Maron, J., Dennis, T., Howes, G. G., Brandenburg, A., Chandran, B., and Blackman, E.  
*New Algorithms for Magnetohydrodynamics and Gravity that Emphasize Resolution and Speed*  
Bulletin of the American Astronomical Society **36** 854 (2004).
8. Howes, G. G.  
*Adaptive Particle Refinement*  
APS Meeting Abstracts, 1006P, (2004).
9. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E. and Schekochihin, A. A.  
*Magnetized Turbulence in Radiatively Inefficient Accretion Flows*  
Bulletin of the American Astronomical Society, **38**, 359, (2006).
10. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E. and Schekochihin, A. A.  
*Gyrokinetic Studies of Astrophysical Turbulence*  
APS Meeting Abstracts, 1115P, (2006).
11. Dorland, W., Ricci, P., Schekochihin, A., Howes, G., Rogers, B. and Ernst, D.  
*Collisional Physics in GS2*  
APS Meeting Abstracts, 1137P, (2006).
12. Barnes, M., Dorland, W., Broemstrup, I. and Howes, G.  
*Resolution Issues in Continuum Gyrokinetic Simulations*  
APS Meeting Abstracts, 1138P, (2006).

13. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E. and Schekochihin, A. A.  
*Gyrokinetic Simulations of Solar Wind Turbulence*  
AGU Fall Meeting Abstracts, B2, (2006).
14. Howes, G. G., Cowley, S. C., Dorland, W., Hammett, G. W., Quataert, E. and Schekochihin, A. A.  
*Critically Balanced Turbulence In Magnetized Plasmas: Implications For Dissipation-scale Turbulence In The Solar Wind*  
American Astronomical Society Meeting Abstracts **210** 55.01 (2007).
15. Howes, G. G., Cowley, S. C., Dorland, W., Quataert, E. and Schekochihin, A. A.  
*Turbulence and Plasma Heating in the Solar Wind*  
AGU Fall Meeting Abstracts, B7, (2007).
16. Kilpua, S., Bale, S., Salem, C., Howes, G., Quataert, E. and Horbury, T.  
*Measurements of the phase speed of the solar wind turbulence at short wavelengths*  
AGU Fall Meeting Abstracts, A1152, (2007).
17. Bale, S. D., Xu, K., Salem, C., Kasper, J. C., Quataert, E. and Howes, G. G.  
*Measured constraints on the suprathermal electron temperature anisotropy in the solar wind*  
AGU Fall Meeting Abstracts, B3, (2007).