

Refereed Publications

1. “On the Survival of Cool Clouds in the Circum-Galactic Medium.” Z. Li, **P. F. Hopkins**, J. Squire, C. Hummels, *Monthly Notices of the Royal Astronomical Society*, 2019, in press [arXiv:1909.02632]
2. “Properties of the Circumgalactic Medium in Cosmic Ray-Dominated Galaxy Halos.” S. Ji, T. K. Chan, C. Hummels, **P. F. Hopkins**, et al. *Monthly Notices of the Royal Astronomical Society*, submitted, 2019, [arXiv:1909.00003]
3. “A Stable Finite-Volume Method for Scalar-Field Dark Matter.” **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 489, 2367
4. “Evidence for a Vast Prograde Stellar Stream in the Solar Vicinity.” L. Necib, B. Ostdiek, M. Lisanti, T. Cohen, M. Freytsis, S. Garrison-Kimmel, **P. F. Hopkins**, A. Wetzel, R. Sanderson, PRL, 2019, submitted [arXiv:1907.07190]
5. “Star formation at the edge of the Local Group: a rising star formation history in the isolated galaxy WLM.” S. M. Albers, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, in press [arXiv:1909.04040]
6. “The Origins of the Circumgalactic Medium in the FIRE Simulations.” Z. Hafen, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 488, 1248
7. “Measuring dynamical masses from gas kinematics in simulated high-redshift galaxies.” S. Wellons, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, submitted, 2019, [arXiv:1908.05274]
8. “Dwarf Galaxies in CDM, WDM, and SIDM: Disentangling Baryons and Dark Matter Physics.” A. Fitts, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, submitted [arXiv:1811.11791]
9. “Cataloging Accreted Stars within Gaia DR2 using Deep Learning.” B. Ostdiek, et al., **P. F. Hopkins**, 2019, *The Astrophysical Journal*, submitted, [arXiv:1907.06652]
10. “The Impact of Enhanced Halo Resolution on the Simulated Circumgalactic Medium.” C. Hummels, B. Smith, **P. F. Hopkins**, et al., 2019, *The Astrophysical Journal*, 882, 156
11. “Radiative Stellar Feedback in Galaxy Formation: Methods and Physics.” **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, in press, 2019, [arXiv:1811.12462]
12. “Be it therefore resolved: Cosmological Simulations of Dwarf Galaxies with Extreme Resolution.” C. Wheeler, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, accepted, 2019, [arXiv:1812.02749]
13. “Cosmic ray feedback in the FIRE simulations: constraining cosmic ray propagation with GeV gamma ray emission.” T. K. Chan, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 488, 3716
14. “Cosmic Rays or Turbulence can Suppress Cooling Flows (Where Thermal Heating or Momentum Injection Fail).” K.-Y. Su, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, accepted [arXiv:1812.03997]
15. “A Predicted Correlation Between Age Gradient and Star Formation History in FIRE Dwarf Galaxies.” A. Graus, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, submitted, [arXiv:1901.05487]
16. “Effects of Gas on Formation and Evolution of Stellar Bars and Nuclear Rings in Disk Galaxies.” W-Y. Seo, W-T Kim, S. Kwak, P-Y Hsieh, C. Han, **P. F. Hopkins**, *The Astrophysical Journal*, 2019, 872, 5
17. “On the dust temperatures of high redshift galaxies.” L. Liang, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 489, 1397
18. “Star formation histories of dwarf galaxies in the FIRE simulations: dependence on mass and Local Group environment.” S. Garrison-Kimmel, A. Wetzel, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 489, 4574
19. “Dynamic localized turbulent diffusion and its impact on the galactic ecosystem.” D. Rennehan, A. Babul, **P. F. Hopkins**, R. Dave, B. Moa, *Monthly Notices of the Royal Astronomical Society*, 2019, 483, 3810
20. “The physics of Lyman- α escape from high-redshift galaxies.” A. Smith, X. Ma, V. Bromm, S. Finkelstein, **P. F. Hopkins**, C. Faucher-Giguere, D. Keres, *Monthly Notices of the Royal Astronomical Society*, 2019, 484, 39
21. “Local Simulations of MRI turbulence with Meshless Methods.” H. Deng, L. Mayer, H. Latter, **P. F. Hopkins**, X-N. Bai, *The Astrophysical Journal Supplements*, 2019, 241, 26

22. “Astro2020 Science White Paper: Physical Conditions in the Cold Gas of Local Galaxies.” A. Leroy, et al., 2019, eprint arXiv:1904.01661
23. “Simulating the Diverse Instabilities of Dust in Magnetized Gas.” **P. F. Hopkins**, J. Squire, D. Seligman, *Monthly Notices of the Royal Astronomical Society*, submitted, [arXiv:1904.11494]
24. “A profile in FIRE: resolving the radial distributions of satellite galaxies in the Local Group with simulations.” J. Samuel, A. Wetzel, E. Tollerud, S. Garrison-Kimmel, S. Loebman, K. El-Badry, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, submitted [arXiv:1904.11508]
25. “The robustness of cosmological hydrodynamic simulation predictions to changes in numerics and cooling physics.” S. Huang, N. Katz, R. Dave, M. Fardal, J. Kollmeier, B. Oppenheimer, M. Peeples, S. Roberts, D. Weinberg, **P. F. Hopkins**, R. Thompson, *Monthly Notices of the Royal Astronomical Society*, 2019, 484, 2021
26. “But What About... Cosmic Rays, Magnetic Fields, Conduction, & Viscosity in Galaxy Formation.” **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, submitted, [arXiv:1905.04321]
27. “Predictions for the spatial distribution of the dust continuum emission in $1 < z < 5$ star-forming galaxies.” R. Cochrane, C. Hayward, D. Angles-Alcazar, J. Lotz, T. Parsotan, X. Ma, D. Keres, R. Feldmann, C. Faucher-Giguere, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 488, 1779
28. “Interacting galaxies on FIRE-2: the connection between enhanced star formation and interstellar gas content.” J. Moreno, P. Torrey, S. Ellison, D. Patton, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 485, 1320
29. “Non-linear evolution of the resonant drag instability in magnetized gas.” D. Seligman, **P. F. Hopkins**, J. Squire, *Monthly Notices of the Royal Astronomical Society*, 2019, 485, 3991
30. “Self-consistent proto-globular cluster formation in cosmological simulations of high-redshift galaxies.” X. Ma, M. Grudic, E. Quataert, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, accepted, [arXiv:1906.11261]
31. “Is it possible to reconcile extragalactic IMF variations with a universal Milky Way IMF?” D. Guszejnov, **P. F. Hopkins**, A. S. Graus, *Monthly Notices of the Royal Astronomical Society*, 2019, 485, 4852
32. “The failure of stellar feedback, magnetic fields, conduction, and morphological quenching in maintaining red galaxies.” K-Y. Su, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 487, 4393
33. “A simple non-equilibrium feedback model for galaxy-scale star formation: delayed feedback and SFR scatter.” M. Orr, C. Hayward, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 486, 4724
34. “Dust attenuation, dust emission, and dust temperature in galaxies at $z \geq 5$: a view from the FIRE-2 simulations.” X. Ma, C. Hayward, C. Casey, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 1844, 1864
35. “Under the Firelight: Stellar Tracers of the Local Dark Matter Velocity Distribution in the Milky Way.” L. Necib, M. Lisanti, S. Garrison-Kimmel, A. Wetzel, R. Sanderson, **P. F. Hopkins**, C. Faucher-Giguere, D. Keres, *The Astrophysical Journal*, 2019, 883, 27
36. “Nonlinear Evolution of Instabilities Between Dust and Sound Waves.” E. Moseley, J. Squire, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, in press, [arXiv:1810.08214]
37. “On The Nature of Variations in the Measured Star Formation Efficiency of Molecular Clouds.” M. Grudic, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 488, 1501
38. “The Elephant in the Room: The Importance of Where and When Massive Stars Form in Molecular Clouds.” M. Grudic, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 488, 2970
39. “The radial acceleration relation is a natural consequence of the baryonic Tully-Fisher relation” C. Wheeler, **P. F. Hopkins**, O. Dore, *The Astrophysical Journal*, 2019, 882, 46
40. “Warm FIRE: Simulating Galaxy Formation with Resonant Sterile Neutrino Dark Matter” Bozek, B. et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 483, 4086
41. “The effects of metallicity and cooling physics on fragmentation: implications on direct-collapse black hole formation” C. Corbett Moran, M. Grudic, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, submitted, [arXiv:1803.06430]

42. “Numerical Problems in Coupling Photon Momentum (Radiation Pressure) to Gas” **P. F. Hopkins**, M. Grudic, *Monthly Notices of the Royal Astronomical Society*, 2019, 483, 4187
43. “The Maximum Stellar Surface Density Due to the Failure of Stellar Feedback” M. Grudic, **P. F. Hopkins**, E. Quataert, N. Murray, *Monthly Notices of the Royal Astronomical Society*, 2019, 483, 5548
44. “Formation, vertex deviation and age of the Milky Way’s bulge: input from a cosmological simulation with a late-forming bar” V. Debattista, et al. **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 485, 5073
45. “Reconciling observed and simulated stellar halo masses” R. Sanderson, et al., **P. F. Hopkins**, *The Astrophysical Journal*, 2018, 869, 12
46. “The Local Group on FIRE: Dwarf galaxy populations across a suite of hydrodynamic simulations” S. Garrison-Kimmel, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2019, 487, 1380
47. “What drives the evolution of gas kinematics in star-forming galaxies?” C.-L. Hung, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2019, 482, 5125
48. “Synthetic Gaia surveys from the FIRE cosmological simulations of Milky-Way-mass galaxies” R. Sanderson, et. al., **P. F. Hopkins**, *The Astrophysical Journal*, accepted [arXiv:1806.10564]
49. “Gas kinematics in FIRE simulated galaxies compared to spatially unresolved H I observations” K. El Badry, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 477, 1536
50. “Dynamic Localised Turbulent Diffusion and its Impact on the Galactic Ecosystem” D. Rennehan, A. Babul, **P. F. Hopkins**, R. Dave, B. Moa, *Monthly Notices of the Royal Astronomical Society*, submitted [arXiv:1807.11509]
51. “Resonant drag instabilities in protoplanetary discs: the streaming instability and new, faster growing instabilities” J. Squire, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2018, 477, 5011
52. “The origin of ultra diffuse galaxies: stellar feedback and quenching” T. K. Chan, D. Keres, A. Wetzel, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 478, 906
53. “The origin of the diverse morphologies and kinematics of Milky Way-mass galaxies in the FIRE-2 simulations” S. Garrison-Kimmel, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 481, 4133
54. “A New Public Release of the GIZMO Code” **P. F. Hopkins**, eprint [arXiv:1712.01294]
55. “Submillimetre flux as a probe of molecular ISM mass in high-z galaxies” Liang., L., et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2018, 478, L83
56. “Predicting the binary black hole population of the Milky Way with cosmological simulations” Lamberts, A. Garrison-Kimmel, S. **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 480, 2704
57. “No assembly required: mergers are mostly irrelevant for the growth of low-mass dwarf galaxies” Fitts, A., et al., **P. F. Hopkins**, 2018, *Monthly Notices of the Royal Astronomical Society*, 479, 319
58. “SDSS-IV MaNGA: constraints on the conditions for star formation in galaxy discs” D. Stark, K. Bundy, M. Orr, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 474, 2323
59. “Ubiquitous instabilities of dust moving in magnetized gas” **P. F. Hopkins**, J. Squire, 2018, *Monthly Notices of the Royal Astronomical Society*, 479, 4681
60. “Isothermal Fragmentation: Is there a low-mass cut-off?” D. Guzsejnov, **P. F. Hopkins**, M. Grudic, M. Krumholz, C. Federrath, 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 182
61. “Where are the most ancient stars in the Milky Way?” El Badry, K., et al., **P. F. Hopkins**, 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 652
62. “Discrete effects in stellar feedback: Individual Supernovae, Hypernovae, and IMF Sampling in Dwarf Galaxies” K. Y. Su, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 480, 1666
63. “Simulating galaxies in the reionization era with FIRE-2: morphologies and sizes.” X. Ma, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2018, 477, 219
64. “Stellar feedback strongly alters the amplification and morphology of galactic magnetic fields.” K.-Y. Su, C. C. Hayward, **P. F. Hopkins**, E. Quataert, C.-A. Faucher-Giguere, D. Keres, *Monthly Notices of the Royal Astronomical Society*, 2018, 473, L111

65. “Modeling chemical abundance distributions for dwarf galaxies in the Local Group: the impact of turbulent metal diffusion.” I. Escala, A. Wetzel, E. N. Kirby, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 474, 2194
66. “Comparing models for IMF variation across cosmological time in Milky Way-like galaxies” D. Guszejnov, **P. F. Hopkins**, X. Ma, *Monthly Notices of the Royal Astronomical Society*, 2017, 472, 2107
67. “Stacked star formation rate profiles of bursty galaxies exhibit ‘coherent’ star formation” M. E. Orr, C. C. Hayward, E. Nelson, **P. F. Hopkins**, et al., *The Astrophysical Journal Letters*, 2017, 849, L2
68. “From the Top Down and Back Up Again: Star Cluster Structure from Hierarchical Star Formation” M. Y. Grudic, D. Guszejnov, **P. F. Hopkins**, et al. *Monthly Notices of the Royal Astronomical Society*, 2018, 481, 688
69. “How To Model Supernovae in Simulations of Star and Galaxy Formation” **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 477, 1578
70. “Universal Scaling Relations in Scale-Free Structure Formation” D. Guszejnov, **P. F. Hopkins**, M. Y. Grudic, *Monthly Notices of the Royal Astronomical Society*, submitted, 2017, [arXiv:1707.05799]
71. “Black Holes on FIRE: Stellar Feedback Limits Early Feeding of Galactic Nuclei” D. Angles-Alcazar, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 472, L109
72. “The Resonant Drag Instability (RDI): Acoustic Modes” **P. F. Hopkins**, J. Squire, *Monthly Notices of the Royal Astronomical Society*, 2018, 480, 2813
73. “Testing the Recovery of Intrinsic Galaxy Sizes and Masses of $z \sim 2$ Massive Galaxies Using Cosmological Simulations” S. Price, et al., **P. F. Hopkins**, *The Astrophysical Journal Letters*, 2017, 844, 6
74. “SIDM on FIRE: Hydrodynamical Self-Interacting Dark Matter simulations of low-mass dwarf galaxies” V. H. Robles, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 472, 2945
75. “Simulating galaxies in the reionization era with FIRE-2: galaxy scaling relations, stellar mass functions, and luminosity functions” X. Ma, **P. F. Hopkins**, et al., *Monthly Notices of the Royal Astronomical Society*, 2018, 478, 1694
76. “Dwarf Galaxy Mass Estimators vs. Cosmological Simulations” A. Gonzalez-Samaniego, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 472, 4786
77. “Resonant drag instability of grains streaming in fluids” J. Squire & **P. F. Hopkins**, *The Astrophysical Journal Letters*, 2018, 856, L15
78. “Converging on the Initial Mass Function of Stars” C. Federrath, M. Krumholz, **P. F. Hopkins**, *Journal of Physics: Conference Series*, 2017, 837, 1
79. “Gas kinematics, morphology, and angular momentum in the FIRE simulations” K. El-Badry, et al., **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2018, 473, 1930
80. “On the deuterium abundance and the importance of stellar mass loss in the interstellar and intergalactic medium” F. van de Voort, E. Quataert, C. A. Faucher-Giguere, D. Keres, **P. F. Hopkins**, T. K. Chan, R. Feldmann, Z. Hafen, 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 80
81. “Better Galactic Mass Models through Chemistry” R. Sanderson, A. Wetzel, S. Sharma, **P. F. Hopkins**, *Galaxies*, 2017, 5, 43
82. “Gaia reveals a metal-rich in-situ component of the local stellar halo” A. Bonaca, C. Conroy, A. Wetzel, **P. F. Hopkins**, D. Keres, 2017, *The Astrophysical Journal*, 845, 101
83. “Formation of Globular Cluster Candidates in Merging Proto-galaxies at High Redshift: A View from the FIRE Cosmological Simulations” J.-H. Kim, X. Ma, M. Y. Grudic, **P. F. Hopkins**, C. C. Hayward, A. Wetzel, C. A. Faucher-Giguere, D. Keres, S. Garrison-Kimmel, N. Murray, *Monthly Notices of the Royal Astronomical Society*, 2017, 474, 4232
84. “The distribution of density in supersonic turbulence” J. Squire, **P. F. Hopkins**, 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 3753
85. “FIRE-2 Simulations: Physics versus Numerics in Galaxy Formation” **P. F. Hopkins**, et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 800

86. “Testing Models for IMF Variation in Milky Way-like Galaxies” D. Guszejnov, **P. F. Hopkins**, X. Ma, *Monthly Notices of the Royal Astronomical Society*, submitted [arXiv:1702.04431]
87. “Protostellar Feedback in Turbulent Fragmentation: Consequences for Stellar Clustering and Multiplicity” D. Guszejnov, **P. F. Hopkins**, M. R. Krumholz, *Monthly Notices of the Royal Astronomical Society*, 2017, 468, 4093
88. “When the Jeans do not fit: How stellar feedback drives stellar kinematics and complicates dynamical modeling in low-mass galaxies” K. El-Badry, A. R. Wetzel, M. Geha, E. Quataert, **P. F. Hopkins**, D. Keres, T. K. Chan, C. A. Faucher-Giguere, *The Astrophysical Journal*, 2017, 835, 193
89. “Scaling Laws of Passive-Scalar Diffusion in the Interstellar Medium” M. J. Colbrook, X. Ma, **P. F. Hopkins**, J. Squire, *Monthly Notices of the Royal Astronomical Society*, 2017, 467, 2421
90. “The Structure and Dynamical Evolution of the Stellar Disk of a Simulated Milky Way-Mass Galaxy” X. Ma, **P. F. Hopkins**, A. R. Wetzel, E. N. Kirby, D. Angles-Alcazar, C. A. Faucher-Giguere, D. Keres, E. Quataert, *Monthly Notices of the Royal Astronomical Society*, 2017, 467, 2430
91. “What FIREs Up Star Formation: the Emergence of the Kennicutt-Schmidt Law from Feedback” M. Orr, C. Hayward, **P. F. Hopkins**, T. K. Chan, C. A. Faucher-Giguere, R. Feldmann, D. Keres, N. Murray, E. Quataert, *Monthly Notices of the Royal Astronomical Society*, 2018, *Monthly Notices of the Royal Astronomical Society*, 478, 3653
92. “Not so lumpy after all: modeling the depletion of dark matter subhalos by Milky Way-like galaxies.” S. Garrison-Kimmel, A. R. Wetzel, J. S. Bullock, **P. F. Hopkins**, M. Boylan-Kolchin, C. A. Faucher-Giguere, D. Keres, E. Quataert, R. E. Sanderson, A. S. Graus, T. Kelley, *Monthly Notices of the Royal Astronomical Society*, 2017, 471, 1709
93. “Why do high-redshift galaxies show diverse gas-phase metallicity gradients?” X. Ma, **P. F. Hopkins**, R. Feldmann, P. Torrey, C. A. Faucher-Giguere, D. Keres, *Monthly Notices of the Royal Astronomical Society*, 2017, 466, 4780
94. “MUFASA: Galaxy star formation, gas, and metal properties across cosmic time” R. Dave, M. Rafieferantsoa, R. J. Thompson, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 467, 115
95. “ALMA Resolves the Nuclear Disks of Arp 220” N. Scoville, et al., **P. F. Hopkins**, *The Astrophysical Journal*, 2017, 836, 66
96. “Forward and backward galaxy evolution in comoving number density space” P. Torrey, S. Wellons, C-P. Ma, **P. F. Hopkins**, M. Vogelsberger, *Monthly Notices of the Royal Astronomical Society*, 2017, 467, 4872
97. “Gravitational torque-driven black hole growth and feedback in cosmological simulations” D. Angles-Alcazar, R. Dave, C. A. Faucher-Giguere, F. Ozel, **P. F. Hopkins**, 2017, *Monthly Notices of the Royal Astronomical Society*, 464, 2840
98. “Anisotropic Diffusion in Mesh-Free Numerical Magnetohydrodynamics” **P. F. Hopkins**, 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 3387
99. “Are the Formation and Abundances of Metal-Poor Stars the Result of Dust Dynamics?” **P. F. Hopkins**, C. Conroy, 2017, *The Astrophysical Journal*, 835, 154
100. “Giant clumps in the FIRE simulations: a case study of a massive high-redshift galaxy” A. Oklopčić, **P. F. Hopkins**, R. Feldmann, D. Keres, C. A. Faucher-Giguere, N. Murray, 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 952
101. “Metal flows of the circumgalactic medium, and the metal budget in galactic halos” A. L. Muratov, D. Keres, C. A. Faucher-Giguere, **P. F. Hopkins**, X. Ma, D. Angles-Alcazar, T. K. Chan, P. Torrey, Z. Hafen, E. Quataert, N. Murray, *Monthly Notices of the Royal Astronomical Society*, 2017, 468, 4170
102. “An instability of feedback regulated star formation in galactic nuclei” P. Torrey, **P. F. Hopkins**, C. A. Faucher-Giguere, M. Vogelsberger, E. Quataert, D. Keres, N. Murray, 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 2301
103. “The no-spin zone: rotation vs dispersion support in observed and simulated dwarf galaxies” C. Wheeler, A. B. Pace, J. S. Bullock, M. Boylan-Kolchin, J. Onorbe, A. Fitts, **P. F. Hopkins**, D. Keres, 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 2420
104. “How stellar feedback simultaneously regulates star formation and drives outflows” C. C. Hayward, **P. F. Hopkins**, 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 1682

105. “(Star)bursts of FIRE: observational signatures of bursty star formation in galaxies” M. Sparre, C. C. Hayward, R. Feldmann, C. A. Faucher-Giguere, A. L. Muratov, D. Keres, **P. F. Hopkins**, 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 88
106. “Feedback first: the surprisingly weak effects of magnetic fields, viscosity, conduction, and metal diffusion on galaxy formation” K.-Y. Su, **P. F. Hopkins**, C. C. Hayward, C. A. Faucher-Giguere, D. Keres, X. Ma, V. H. Robles, *Monthly Notices of the Royal Astronomical Society*, 2017, 471, 144
107. “Colours, Star formation Rates, and Environments of Star forming and Quiescent Galaxies at the Cosmic Noon” R. Feldmann, E. Quataert, **P. F. Hopkins**, C. A. Faucher-Giguere, D. Keres, *Monthly Notices of the Royal Astronomical Society*, 2017, 470, 1050
108. “The Cosmic Baryon Cycle and Galaxy Mass Assembly in the FIRE Simulations” D. Angles-Alcazar, C. A. Faucher-Giguere, D. Keres, **P. F. Hopkins**, E. Quataert, N. Murray, *Monthly Notices of the Royal Astronomical Society*, 2017, 470, 4698
109. “FIRE in the Field: Simulating the Threshold of Galaxy Formation” A. Fitts, M. Boylan-Kolchin, O. D. Elbert, J. S. Bullock, **P. F. Hopkins**, J. Onorbe, A. R. Wetzel, C. Wheeler, C. A. Faucher-Giguere, D. Keres, E. D. Skillman, D. R. Weisz, *Monthly Notices of the Royal Astronomical Society*, 2017, 471, 3547
110. “The Dynamics of Charged Dust in Magnetized Molecular Clouds” H. Lee, **P. F. Hopkins**, J. Squire, *Monthly Notices of the Royal Astronomical Society*, 2017, 469, 3532
111. “When Feedback Fails: The Scaling and Saturation of Star Formation Efficiency” M. Y. Grudic, **P. F. Hopkins**, C. A. Faucher-Giguere, E. Quataert, N. Murray, D. Keres, *Monthly Notices of the Royal Astronomical Society*, 2018, 475, 3511
112. “Low-Redshift Lyman Limit Systems as Diagnostics of Cosmological Inflows and Outflows” Z. Hafen, C.-A. Faucher-Giguere, C.-A., D. Angles-Alcazar, D. Keres, R. Feldmann, T.-K. Chan, E. Quataert, N. Murray, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society*, 2017, 469, 2292
113. “High Angular Momentum Halo Gas: a Feedback and Code-Independent Prediction of LCDM” K. Stewart, A. Maller, J. Onorbe, J. Bullock, M. R. Joung, J. Devriendt, D. Ceverino, D. Keres, **P. F. Hopkins**, C. A. Faucher-Giguere, *The Astrophysical Journal*, 2017, 843, 47
114. “The AGORA High-resolution Galaxy Simulations Comparison Project. II. Isolated Disk Test” J.-H. Kim, et al., **P. F. Hopkins**, *The Astrophysical Journal*, 2016, 833, 202
115. “When and where did GW150914 form?” A. Lamberts, S. Garrison-Kimmel, D. Clausen, **P. F. Hopkins**, *Monthly Notices of the Royal Astronomical Society Letters*, 2016, 463, 1
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228. “A Cosmological Framework for the Co-Evolution of Quasars, Supermassive Black Holes, and Elliptical Galaxies: I. Galaxy Mergers & Quasar Activity.” **P. F. Hopkins**, L. Hernquist, T. J. Cox, D. Kereš, 2008, *The Astrophysical Journal*, 175:356-389
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249. “The Luminosity Dependence of Quasar Clustering.” A. Lidz, **P. F. Hopkins**, T. J. Cox, L. Hernquist, B. Robertson, 2006, *The Astrophysical Journal*, 641:41-49.
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251. “Determining the Properties and Evolution of Red Galaxies from the Quasar Luminosity Function.” **P. F. Hopkins**, L. Hernquist, T. J. Cox, B. Robertson, V. Springel, 2006, *The Astrophysical Journal Supplements*, 163:50-79
252. “A Unified, Merger-driven Model of the Origin of Starbursts, Quasars, the Cosmic X-Ray Background, Supermassive Black Holes, and Galaxy Spheroids.” **P. F. Hopkins**, L. Hernquist, T. J. Cox, T. Di Matteo, B. Robertson, V. Springel, 2006, *The Astrophysical Journal Supplements*, 163:1-49
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258. “Cluster Alignments and Ellipticities in Λ CDM Cosmology.” **P. F. Hopkins**, N. A. Bahcall, P. Bode, 2005, *The Astrophysical Journal*, 618:1-15
259. “Dust Reddening in Sloan Digital Sky Survey Quasars.” **P. F. Hopkins**, M. A. Strauss, P. B. Hall, G. T. Richards, A. S. Cooper, D. P. Schneider, D. E. Vanden Berk, S. Jester, J. Brinkmann, G. P. Szokoly, 2004, *The Astronomical Journal*, 128:1112-1123

Invited Talks & Colloquia

1. “Formation of Globular Clusters in Cosmological Simulations” Invited Talk, Conference “Uncovering the Physics of Formation of Globular Clusters” KITP, Santa Barbara, May 2020 (cancelled for covid-19)
2. “Dissipative Dark Matter: Novel Constraints and Frontiers” Invited Talk, Simons Foundation Symposium “Illuminating Dark Matter (2),” Germany, April 2020 (remote for covid-19)
3. “Incorporating Novel Plasma Physics in Galaxy Simulations” Invited Talk, Conference “Computational Galaxy Formation,” Ringberg Castle, Germany, April 2020 (cancelled for covid-19)
4. “Dust in Traps and Outflows” Invited Talk, Conference “The Building Blocks of Planets” Germany, April 2020 (cancelled for covid-19)
5. “The Future of FIRE” Invited Talk, FIRE Workshop 2020, UT Austin, March 2020
6. “The Physics of Relativity and Time Travel” Invited Public Lecture, Los Angeles Gallifrey One Convention, Los Angeles, February 2020
7. “Turbulence and Dust in the ISM” Invited Talk, Conference “Cosmic turbulence and magnetic fields,” Cargese, France, November 2019
8. “New Physics in Galaxy Formation” Invited Talk, GalFRESKA Conference, UC Irvine, August 2019
9. “Resonant Drag Instabilities Across Physical Systems” Invited Talk, “Turbulence and Structure Formation in Protoplanetary Disks,” Ringberg Castle, Germany, July 2019
10. “Cosmic “Dust” (Galaxies, Stars, and Actual Dust)!” Colloquium, Caltech, May 2019
11. “Updates on FIRE” Invited Talk, KITP GAIA Workshop, April 2019
12. “Galaxies and Stars as Engines” Colloquium, Pomona College, April 2019
13. “The Next Generation of Dark Matter Searches” Invited Talk, Simons Center for Computational Astrophysics, April 2019
14. “The Most Uncertain Physics in Galaxy Formation” Invited Talk, Conference “Big Eyes on the Universe,” UCLA, January 2019
15. “Dust to Dust: Galaxies, Stars, and (Actual) Dust” Colloquium, Mount Stromlo Observatory, Australian National University, Canberra, December 2018
16. “(The ISM+Dust in) Galaxy Simulations” Invited Plenary Talk, van de Hulst Centennial Symposium, Leiden, Netherlands, November 2018
17. “Updates on FIRE” Invited Talk, GalFRESKA Conference, Caltech, August 2018
18. “Numerical Breakthroughs in Mesh-Free and Moving-Mesh Methods from Astrophysics” Invited Plenary Talk, IUPAP Conference on Computational Physics, UC Davis, July 2018
19. “How Dust Might Change Everything” Overview Talk, Flatiron KSPA Summer School, Flatiron Institute, June 2018
20. “Is There Any (Gravitational) Case for Non-Standard Dark Matter?” Invited Talk, Simons Foundation Symposium “Illuminating Dark Matter,” Germany, May 2018
21. “Feedback & Dark Matter: Are there Actually Small-Scale Challenges?” Colloquium, Joint Kavli Institute for Cosmological Physics-University of Chicago Colloquia, May 2018
22. “A New Class of Instabilities in Dusty Gas” Colloquium, Joint Institute for Advanced Studies-Princeton Astrophysics Colloquia, April 2018
23. “Numerical Lessons in Modeling Star and Galaxy Formation” Invited Talk, Conference “Computational Galaxy Formation,” Ringberg Castle, Germany, March 2018
24. “Star Formation on All Scales” Colloquium, University of Southern California, February 2018
25. “Big Bang to Milky Way: The Universe On a Computer” Public Lecture Series, Los Angeles Astronomical Society, November 2017

26. “Stars Shaping Galaxies: New Understanding of Structure in CDM” Colloquium, Case Western Reserve University, November 2017
27. “The Universe on A Computer: The Formation of Galaxies, Stars, and Planets in a Violent Cosmos” Frontiers of Astronomy Public Lecture Series, Cleveland Museum of Natural History, November 2017
28. “The Resonant Drag Instability: Implications Across Astrophysical Scales” Colloquium, University of California, Berkeley, October 2017
29. “Making Galaxies on a Computer” Public Lecture, Brisbane Boys College, September 2017
30. “Stars Re-Shaping Galaxies” Colloquium, Swinburne University, Australia, September 2017
31. “Dust is Not Gas” Colloquium, Monash University, Australia, September 2017
32. “Updates on FIRE and other Work” Invited Talk, Santa Cruz Galaxy Formation Workshop, Santa Cruz, August 2017
33. “New Instabilities in Dusty Gas” Colloquium, Jet Propulsion Laboratory (JPL), August, 2017
34. “Linking Star Formation Across Scales” Invited Review Talk, “Linking Observations and Theory Across the Scales of Star Formation in Galaxies” , Sexten, Italy, July 2017
35. “FIRE and the Baryon Cycle” Invited Talk, “Whereabouts and Physics of the Roaming Baryons in the Universe” , Sexten, Italy, July 2017
36. “The Resonant Drag Instability: A New Class of Instabilities in Dusty Gas” Invited Talk, “Disk Instabilities across cosmic scales” , Sexten, Italy, July 2017
37. “Stars Re-Shaping Galaxies (aka Feedback: Now with Physics)” Colloquium, Johns Hopkins University, Baltimore, Maryland, April 2017
38. “Stars, Galaxies, and the State of Cold Dark Matter” Colloquium, University of Wyoming (Physics Department), Laramie, Wyoming, April 2017
39. “A New Approach to Turbulence” Colloquium, University of Wyoming (Math Department), Laramie, Wyoming, April 2017
40. “New Numerical Methods and Breakthroughs in High-Dynamic Range Simulations” Colloquium, Flatiron Institute (Simons Center for Computational Astrophysics), New York, February 2017
41. “Feedback: Nature Hates Theorists” Invited Talk, “The Galactic Renaissance,” Caltech, February 2017
42. “Updates on FIRE” Summary Talk, FIRE (Feedback in Realistic Environments) project workshop, University of California San Diego, January 2017
43. “Feedback: Now with Physics” Plenary Talk, Warner Prize Lecture, American Astronomical Society Meeting 229, Grapevine, Texas, January 2017
44. “The State of Feedback In Realistic Environments” Conference Summary Talk, GALFRESCA workshop, Caltech, September 2016
45. “AGN Feedback” Invited Review Talk, Conference, “Mapping the Pathways of Galaxy Transformation,” Catalina Island, July 2016
46. “AGN: What’s in a Name?” Plenary & Conference Summary Talk, Conference “AGN: What’s in a Name?” ESO, Garching, Germany, June 2016
47. “Numerics, Physics, Resolution: Towards Predictive Simulations of Galaxy Formation” Invited Talk, Conference “Computational Galaxy Formation,” Ringberg Castle, Germany, May 2016
48. “Stars Shaping Galaxies” Invited Talk, Conference “What Shapes Galaxies,” Space Telescope Science Institute, April 2016
49. “Stellar Feedback and Galaxy Formation” Colloquium, McMaster University, Hamilton, Canada, March 2016
50. “The Radical Impact of Stellar Feedback on Galaxies” Invited Seminar, Canadian Institute for Theoretical Astrophysics (CITA), Toronto, Canada, March 2016

51. “Updates on FIRE” Summary Talk, FIRE (Feedback in Realistic Environments) project workshop, University of California Berkeley, January 2016
52. “Why You Have to Do Feedback Right” Invited Seminar, University of Sydney, December 2015
53. “Turbulence and Stellar Feedback: It Changes Everything” Colloquium, Australian National University, December 2015
54. “The Dramatic Implications of Feedback for Star Formation” Colloquium, University of Michigan, December 2015
55. “Stellar Feedback: Its Role and Effects” Invited Seminar, Michigan State University, December 2015
56. “The Dramatic Effects of Stellar Feedback” Colloquium, NASA Goddard Space Flight Center, October 2015
57. “Why Stellar Feedback Matters for Galaxy Formation” Invited Seminar, University of Maryland, October 2015
58. “Feedback from Stars: How it Shapes Galaxies” Colloquium, University of California Santa Barbara, October 2015
59. “The Dramatic Effects of Stellar Feedback on Galaxy Formation” Colloquium, Institute for Theory and Computation, Harvard University, September 2015
60. “The Surprising Dynamics of Dust: Implications for Stellar Abundances” Invited Presentation, Institute for Theory and Computation, Harvard University, September 2015
61. “A New Approach To Turbulence” Invited Talk, International Astronomical Society Meeting (Focus Meeting 18), Honolulu, Hawaii, August 2015
62. “Theoretical Speculations” Invited Talk, COSMOS Team Meeting in Honor of Nick Scoville, Honolulu, Hawaii, August 2015
63. “Cosmological Simulations: The Feedback Frontier” Invited Talk, International Astronomical Society Meeting (Division J), Honolulu, Hawaii, August 2015
64. “Feedback Regulates Star Formation.” Invited Review Talk, International Astronomical Society Meeting, Honolulu, Hawaii, August 2015
65. “Cosmological Simulations: The Gas Dynamics Frontier.” Invited Review Talk, American Physical Society Meeting, April, 2015
66. “Simulating a Galaxy On a Computer.” Seminar, Cal State Los Angeles, January 2015
67. “Galaxy Simulations: The State of the Art.” Seminar, Cal Poly Pomona, November 2014
68. “Lighting the Circum-Galactic Medium on FIRE: Feedback and Galaxy Winds.” Colloquium, University of Colorado, Boulder, November 2014
69. “Stellar Feedback Explains Inefficient Star Formation and the Form of the Initial Mass Function.” Invited Talk, Conference, “Star Formation Across Space and Time,” ESA-Estec, Netherlands, November 2014
70. “Feedback from Stars and Galactic Star Formation: The State of Theory and Models.” Review Talk, Keck Institute for Space Studies Conference, “Bridging the Gap: Observations and Theory of Star Formation Meet on Large and Small Scales,” Caltech, October 2014
71. “Galaxies on FIRE: Feedback and the Self-Regulation of Star Formation.” Seminar, Princeton University, September 2014
72. “GIZMO: New, Accurate Meshless Methods for Hydrodynamics.” Invited Talk, Conference, “AREPO-fest 2014,” Harvard University, September 2014
73. “Updates on FIRE (Feedback in Realistic Environments)” Invited Talk, Santa Cruz Galaxy Formation Workshop, UC Santa Cruz, August 2014
74. “Making Galaxies on a Computer.” Invited Public Talk, “Pixar University” Lecture Series, Pixar Headquarters, Emeryville, CA, August 2014
75. “GIZMO: New Methods for Numerical Hydrodynamics.” Invited Talk, FIRE (Feedback in Realistic Environments) Workshop, Northwestern University, July 2014

76. “Feedback: Linking Scales from Molecular Cloud Cores to Galaxy Clusters.” Joint Colloquium, Heidelberg University & MPA, July 2014
77. “What Doesn’t Quench Galaxy Formation?” Invited Talk, Conference, “Quenching and Quiescence,” Heidelberg University, Germany, July 2014
78. “Galactic Winds with Realistic Feedback: Implications for Future IFU Surveys.” Invited Talk, Conference, International Astronomical Union Symposium, Vienna, Austria, July 2014
79. “Feedback from Stars and Black Holes in Galaxy Formation.” Colloquium, Institute for Physics and Mathematics of the Universe (IMPU), Tokyo, June 2014
80. “Galaxies on FIRE: Why Are Galaxies Such Lightweights?” Solicited Press Conference, American Astronomical Society Meeting 224, Boston, June 2014
81. “Galaxies on FIRE: Stellar Feedback Explains Inefficient Star Formation.” Contributed Talk, American Astronomical Society Meeting 224, Boston, June 2014
82. “Stellar Feedback Explains Inefficient Star Formation: What Else Can it Do?” Invited Talk, Conference, “Gas in and Around Galaxies,” Ringberg Castle, Germany, May 2014
83. “The Job Market: An Informal Discussion.” Invited Talk, Caltech-Carnegie-JPL Pasadena Area Postdoc Retreat, Lake Arrowhead, California, April 2014
84. “Galaxies on FIRE: Stellar Feedback from the ISM through Cosmology” Invited Talk, Conference & KITP Workshop Guest, “Fire Down Below,” Kavli Institute for Theoretical Physics, UC Santa Barbara, April 2014
85. “Galaxy Formation Simulations: Prospects and Challenges” Invited Talk, Conference “Approaching Exascale”, The University of California High-Performance AstroComputing Center, Lawrence Berkeley Labs, March 2014
86. “Feedback in Galaxy Formation and Implications for 3D Surveys” Invited Talk, Conference “3D2014: Gas and stars in galaxies” ESO, Garching, Germany, March 2014
87. “Cosmological Simulations: Now With Physics!” Colloquium, National Radio Astronomy Observatory, Socorro, March 2014
88. “Turbulence and IMF Variation: Jeans is Dead” Invited Talk, Conference “The Near-Field Deep-Field Connection” UC Irvine, February 2014
89. “How Supernovae Tell Us About the History of Our Universe” Public Talk, California Institute of Technology, February 2014
90. “Feedback, Galaxy Formation, and the Future” Colloquium, Jet Propulsion Laboratory, Pasadena, December 2013
91. “Galaxy Formation With Realistic Stellar Feedback” Invited Talk, Center for Astrophysics and Space Science, UC San Diego, December 2013
92. “Cosmological Simulations: Now With Physics!” Invited Talk, ESO Conference “Deconstructing Galaxies: Structure and Morphology in the Era of Large Surveys”, Santiago, Chile, November 2013
93. “Getting Gas from the Hubble Flow to a Black Hole” Invited Review Talk, Conference “Putting Accretion Theory to the Test (2013 JSI Meeting)”, Annapolis, November 2013
94. “Realistic Stellar Feedback: Why It Matters” Colloquium, Canadian Institute for Theoretical Astrophysics (CITA), Toronto, Canada, September 2013
95. “Cosmological Simulations: Now With Physics!” Colloquium, Carnegie Observatories, Pasadena, September 2013
96. “The Monster Roars: AGN Feedback and Co-Evolution with Galaxies” Invited Review Talk, Conference “Fifty Years of Quasars,” California Institute of Technology, September 2013
97. “Outflows in Cosmological Simulations with Explicit Stellar Feedback: Why it Matters” Invited Talk, Conference “Outflows at UCSB”, University of California Santa Barbara, August 2013
98. “Cosmological Simulations With Explicit Stellar Feedback” Invited Talk, Santa Cruz Galaxy Formation Workshop, UC Santa Cruz, August 2013

99. “Thinking About Turbulence – What It Means for You” Invited Lecture, ISSAC Astro-Computing Summer School, University of California Santa Cruz, July 2013
100. “Star Formation and Feedback in Galaxy Formation” Invited Talk, Conference “Feeding, Feedback, and Fireworks”, Hamilton Island, Australia, June 2013
101. “Feedback and Galaxy Formation” Colloquium, Stanford University, February 2013
102. “The Origins of ISM Structure, the Stellar IMF, and (perhaps) Planet Formation” Invited Protostars and Planets Seminar, University of California Berkeley, February 2013
103. “Fluid Mixing in Smooth-Particle Hydrodynamics” Invited Talk, Conference “The Future of SPH,” Max-Planck-Institute for Astrophysics, Munich, February 2013
104. “Star Formation, Black Holes, and Feedback in Galaxy Formation” Colloquium, University of Victoria, Victoria, Canada, February 2013
105. “Does Stellar Feedback Solve Dark Matter Problems?” Invited Talk, Harvard University Center for Astrophysics, January 2013
106. “A New Approach to Turbulence” Bok Prize Colloquium, Harvard University Center for Astrophysics, January 2013
107. “The Origins of ISM Structure, Stellar Clustering, and a (Nearly Universal) IMF” Invited Talk, Conference “Is the Stellar IMF Universal?” Lorentz Center, Leiden, Netherlands, November 2012
108. “Understanding the Evolution of Black Holes, Stars, and Galaxies at High Resolution” Invited Talk, Einstein Fellowship Symposium, Harvard-Smithsonian Center for Astrophysics, October 2012
109. “Star Formation, Black Holes, & Feedback in Galaxy Formation” Colloquium, Mount Stromlo Observatory, Australian National University, Canberra, August 2012
110. “Turbulence and the Structure of the Interstellar Medium” Invited Talk, Conference “Galaxy Formation 2012,” University of California Santa Cruz, August 2012
111. “Feedback: Now with Physics” Invited Talk, Conference “Galaxy Formation 2012,” University of California Santa Cruz, August 2012
112. “ISM Structure, Stellar Clustering, & a (Nearly) Universal IMF” Invited Talk, Conference “Galactic Star Formation,” University of Heidelberg, Germany, August 2012
113. “Galactic Winds, Star Formation, and Feedback” Invited Talk, Conference “Gas, Stars and Black Holes in the Galaxy Ecosystem,” Lorentz Center, Leiden, Netherlands, July 2012
114. “Feedback in Simulations and Observations” Invited Talk, CANDELS Team Meeting, Lorentz Center, Leiden, Netherlands, May 2012
115. “Galaxy Formation and Feedback Processes” Colloquium, Cambridge University Institute of Astronomy, March 2012
116. “Towards Realistic Feedback Processes in the ISM and Star Formation” Invited Talk, Conference “Cosmic-ray Induced Phenomenology in Star-Forming Environments,” Barcelona, Spain, April 2012
117. “Galaxy Mergers, Starbursts, and Black Hole Fueling” Invited Talk, Conference “Interacting Galaxies and Binary Quasars,” Trieste, Italy, April 2012
118. “Star Formation, Black Holes, & Feedback in Galaxy Formation” Colloquium, Harvard University Center for Astrophysics, March 2012
119. “Star Formation, Black Holes, & Feedback in Galaxy Formation” Colloquium, University of Washington, Seattle, February 2012
120. “The Structure of the Interstellar Medium, Stellar Feedback, and Galaxy Formation” Colloquium, University of Chicago, Kavli Institute for Cosmological Physics, February 2012
121. “Advanced Galaxy Formation: Star Formation & Black Holes” Colloquium, Columbia University, February 2012
122. “The Structure of the Interstellar Medium: Turbulence, Gravity, and Feedback” Colloquium, Massachusetts Institute of Technology, February 2012

123. “Star Formation, Black Holes, & Feedback in Galaxy Formation” Colloquium, University of Maryland, February 2012
124. “Star Formation, Black Holes, & Feedback in Galaxy Formation” Colloquium, The Ohio State University, January 2012
125. “Feedback from Stars and Black Holes in Galaxy Formation” Invited Talk, *Watching Galaxies Grow Up* Ringberg Castle, Germany, December 2011
126. “How Do Black Holes Get (and Get Rid of) Their Gas?” Invited Talk, Einstein Fellowship Symposium, NASA Goddard, October 2011
127. “Feedback from Stars and Black Holes in Galaxy Formation” Colloquium, University of California Los Angeles, October 2011
128. “Stellar Feedback in Galaxy Formation” Seminar, University of California Irvine, October 2011
129. “Feedback-Regulated Star Formation” UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2011
130. “Quasar Feedback in Galaxies” Invited Review Talk, *Galaxy Formation 2011* Durham University, England, July 2011
131. “Feedback-Regulated Star Formation on Galactic Scales” Invited Talk, *Star Formation in Galaxies, the Herschel Era* Ringberg Castle, Germany, June 2011
132. “Gas, Mergers, and Feedback: Driving an Evolving Hubble Sequence” Colloquium, University of Arizona, Tucson, February 2011
133. “The Origin of the Hubble Sequence: Gas, Mergers, and Feedback from Stars and Black Holes” Colloquium, University of California at Berkeley, February 2011
134. “Gas, Mergers, and Feedback: Their Role in Galaxy Formation” Colloquium, University of California at Santa Cruz, January 2011
135. “How Do Massive Black Holes Get Their Gas?” Colloquium as Beatrice Tinsley Visiting Research Scholar, University of Texas, Austin, November 2010
136. “How Massive Black Holes Get Their Gas, and What It Means for Galaxy Formation,” Invited Talk, *Massive Galaxies through Cosmic Time III*, University of Arizona, Tucson, November 2010
137. “Super-Massive Black Hole Growth and Feedback,” Invited Talk, The Ohio State University, October 2010
138. “How To Grow a Black Hole,” Colloquium, University of California at Santa Cruz, October 2010
139. “How Do Massive Black Holes Get Their Gas (And Get Rid of It)?” Colloquium, University of California at Berkeley, September 2010
140. “Black Hole Fueling and Feedback in Massive Starbursts” Colloquium, University of Maryland, College Park, September 2010
141. “How Do Black Holes Get Their Gas?” Invited Talk, UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2010
142. “Dealing with Large Ensembles of Simulations”, Invited Lecture, *Astro-Computing* Summer School on Galaxy Simulations, University of California at Santa Cruz, August 2010
143. “How Do Black Holes Get Their Gas?” Invited Talk, *What Drives the Growth of Black Holes?* Durham University, England, July 2010
144. “Gas, Galaxy Mergers, and Feedback: Diversity and Structure in the Hubble Sequence,” Invited Talk, *Extreme Starbursts in the Local Universe* Granada, Spain, June 2010
145. “Gas & Galaxy Mergers: Driving an Evolving Hubble Sequence,” Invited Talk, *Emergence of the Hubble Sequence* $1 < z < 3$; Oort Workshop, Leiden University, Netherlands, June 2010
146. “Are Disks Formed In Mergers?” Conference Closing Debate (with F. Bournaud), *Galaxies in the Distant Universe: Dynamics, Gas, and Early Evolution* Ringberg Castle, Germany, May 2010
147. “Gas & Galaxy Mergers: Building the Hubble Sequence,” TAPIR Seminar, California Institute of Technology, May 2010

148. “Black Holes, Starbursts, and Gas Inflows” Colloquium, Columbia University, April 2010
149. “How Do Massive Black Holes Get Their Gas?” Seminar, Princeton University, April 2010
150. “Fueling Massive Black Holes and Building Galactic Nuclei,” Herzberg Institute of Astrophysics, Victoria, Canada, March 2010
151. “Gas Inflows in Mergers, Starbursts, and AGN,” Joint Colloquium, University of Virginia/NRAO, March 2010
152. “Feeding and Feedback from Massive Black Holes,” ACKS Seminar/Colloquium, SLAC, February 2010
153. “How Do Massive Black Holes Get Their Gas?” Invited Talk, *Formation and Evolution of Black Holes* Aspen Winter Conference, February 2010
154. “Galaxy Mergers: A Factory for Ellipticals, Quasars, Feedback, and Even Disks?” Colloquium, Space Telescope Science Institute, October, 2009
155. “Quasars, Feedback (and Galaxy Formation),” Joint Astronomy Colloquium, MPE Garching, Germany, October 2009
156. “Dissipation, Mergers, and the Formation of Bulges and Disks,” Seminar, MPA Garching, Germany, October 2009
157. “Galaxy Mergers: Quasars, Ellipticals, and Disks,” Theory Seminar, Paris Institute of Astrophysics (IAP), France, September 2009
158. “Galaxy Mergers: What Can They Do For You?,” Seminar, Observatoire de Paris, France, September 2009
159. “Gas & Galaxy Mergers: More Important than You Think,” Invited Talk, *Assembly, Gas Content and Star Formation History of Galaxies*, Charlottesville, VA, September 2009
160. “The Large-Scale Effects of Feedback on Galaxies and their Environment,” Invited Talk, *XXVII General Assembly of the International Astronomical Union: Evolution of Galaxies and Central Black Holes*, Rio de Janeiro, Brazil, August 2009
161. “Galaxy Collisions: A Factory for Ellipticals, Quasars, Feedback, and Disks,” Plenary Talk, *214th Meeting of the American Astronomical Society*, Pasadena, CA, June 2009
162. “Galaxy Mergers, Quasars, and the Formation of Massive Spheroids,” Colloquium, Yale University, April 2009
163. “The Role of Dissipation in Galaxy Mergers,” Colloquium, University of California at Santa Cruz, April 2009
164. “Galaxy Mergers and AGN Feedback,” Seminar, University of California at Davis, March 2009
165. “The First Napa Meeting,” Conference Summary Talk, *The 2009 Napa Galaxy Formation and Evolution Workshop*, Napa, CA, February 2009
166. “Disk Survival & the Importance of Dissipation in Mergers,” Invited Talk, *The 2009 Napa Galaxy Formation and Evolution Workshop*, Napa, CA, February 2009
167. “Quasars, Feedback, and Galaxy Formation,” Colloquium, California Institute of Technology, January 2009
168. “Galaxy Mergers: Quasars, Feedback, and Galaxy Morphology,” Seminar, University of California Santa Barbara, January 2009
169. “Quasars, Feedback, and Galaxy Formation,” Plenary Talk, *24th Texas Symposium on Relativistic Astrophysics*, Vancouver, Canada, December 2008
170. “Galaxy Collisions: A Factory for Quasars, Feedback, Ellipticals, and even Disks?,” Colloquium, The Ohio State University, December 2008
171. “Gas in Galaxy Mergers: More Important Than You Think,” Invited Talk, *Galaxy Evolution: Emerging Insights and Future Challenges*, The University of Texas at Austin, November 2008
172. “The Merger-AGN Connection: What Models Say and How Observations Can Show Them Wrong,” Invited Talk, *The Starburst-AGN Connection*, Shanghai, China, October 2008
173. “Galaxy Collisions: A Factory for Quasars, Feedback, Ellipticals, and even Disks?,” Colloquium, University of Washington, October 2008

174. “AGN Feedback: Models and Tests,” Chaired session at Aspen Summer Session *Active Galactic Nuclei: The interplay between Supermassive Black Holes, Star Formation, and Galaxy Evolution*, July 2008
175. “Quasars and Feedback in Galaxy Interactions,” Cosmology Seminar, CITA, April 2008
176. “Quasars, Feedback, & Galaxy Interactions,” Colloquium Series as Beatrice Tinsley Visiting Research Scholar, University of Texas, Austin, April 2008
177. “Mergers and Dissipation in Spheroid Formation,” Seminar, Princeton University, February 2008
178. “Quenching Models: Their Interplay & Degeneracies,” Invited Talk, *Panoramic Views of Galaxy Formation and Evolution*, Hayama, Japan, December 2007
179. “The Role and Evidence of Dissipation in Elliptical Formation,” KIPAC Cosmology Seminar, Stanford University, December 2007
180. “Quasars, Mergers, and Spheroid Evolution,” Invited Talk, *Galaxy and Black Hole Evolution: Towards a Unified View*, University of Arizona, Tucson, November 2007
181. “The Role of Dissipation in Spheroid Formation,” TAC Seminar, University of California, Berkeley, November 2007
182. “AGN and Galaxy Formation,” Seminar, Institute for Advanced Study, Princeton, October 2007
183. “AGN and Cosmology: Overview and Context,” Keynote Talk, CCAPP AGN Workshop, The Ohio State University, October 2007
184. “Fundamental Planes and Galaxy Formation,” Invited Lecture Series, Novicosmo Summer School on Galaxy Formation, Novigrad, Croatia, September 2007
185. “The Merger-Driven Star Formation History of the Universe,” Invited Talk, KITP Conference: *Star Formation Then and Now*, August 2007
186. “Beyond $M_{\text{BH}} - \sigma$,” IAU Symposium, Oxford University, July 2007
187. “Merger-Driven Evolution of Galaxies & Quasars,” Colloquium, Imperial College, London, July 2007
188. “Different Ways to Quench: Breaking Degeneracies,” UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2007
189. “Connecting AGN and the Red Sequence Transition,” Review Talk, COSMOS Collaboration Meeting, New York, June 2007
190. “Mergers, AGN, & Quenching,” Invited Talk, *The Impact of AGN Feedback on Galaxy Formation*, Ringberg Castle, Germany, May 2007
191. “The Impact of Quasar Feedback on the Formation of Red Galaxies,” Invited Talk, EGS Collaboration Workshop, University of California, Berkeley, December 2006
192. “Mergers, Quasars, & Elliptical Galaxies,” TAC Seminar, University of California, Berkeley, December 2006
193. “Quasars and Quenching of Red Galaxies,” Invited Talk, *Massive Galaxies through Cosmic Time II*, University of Arizona, Tucson, November 2006
194. “Quasars, Mergers and the Buildup of Elliptical Galaxies,” Invited Talk, *From the Local Universe to the Red Sequence*, Space Telescope Science Institute, October 2006
195. “The Origins & Evolution of the Quasar Luminosity Function,” Seminar, MPA Heidelberg, July 2006
196. “Uniting Mergers, Quasars, & Elliptical Galaxies,” Invited Lecture Series, MPA Garching, July 2006
197. “AGN Feedback: Quasars, Mergers, & Galaxy Formation,” Seminar, University of Texas, Austin, April 2006
198. “Quasars, Mergers, and Galaxy Formation,” Colloquium, University of Arizona, Tucson, March 2006
199. “AGN Feedback,” Seminar, Carnegie Institute, Pasadena, March 2006
200. “A Unified Model of Quasar Formation,” Seminar, Princeton University, May 2005