Refereed Publications

419. "Stellar feedback-regulated black hole growth: driving factors from nuclear to halo scales", Byrne, L., Faucher-Giguère, C.-A., Stern, J., Anglés-Alcázar, D., Wellons, S., Gurvich, A. B., & Hopkins, P. F. 2023, *Monthly Notices of the Royal Astronomical Society*, 520, 722

418. "A new discrete dynamical friction estimator based on N-body simulations", Ma, L., Hopkins, P. F., Kelley, L. Z., & Faucher-Giguère, C.-A. 2023, *Monthly Notices of the Royal Astronomical Society*, 519, 5543

417. "FIRE-3: updated stellar evolution models, yields, and microphysics and fitting functions for applications in galaxy simulations", Hopkins, P. F., Wetzel, A., Wheeler, C., et al. 2023, *Monthly Notices of the Royal Astronomical Society*, 519, 3154

416. "Rapid disc settling and the transition from bursty to steady star formation in Milky Way-mass galaxies", Gurvich, A. B., Stern, J., Faucher-Giguère, C.-A., et al. 2023, *Monthly Notices of the Royal Astronomical Society*, 519, 2598

415. "An accurate treatment of scattering and diffusion in piecewise power-law models for cosmic ray and radiation/neutrino transport", Hopkins, P. F. 2023, *Monthly Notices of the Royal Astronomical Society*, 518, 5882

414. "What Causes The Formation of Disks and End of Bursty Star Formation?", Hopkins, P. F., Gurvich, A. B., Shen, X., et al. 2023, *arXiv e-prints*, arXiv:2301.08263

413. "Single Flux Quantum-Based Digital Control of Superconducting Qubits in a Multi-Chip Module", Liu, C.-H., Ballard, A., Olaya, D., et al. 2023, *arXiv e-prints*, arXiv:2301.05696

412. "$[\mathrm{C_{II}}]$ 158 $\mu\mathrm{m}$ emission as an indicator of galaxy star formation rate", Liang, L., Feldmann, R., Murray, N., et al. 2023, *arXiv e-prints*, arXiv:2301.04149

411. "Local positive feedback in the overall negative: the impact of quasar winds on star formation in the FIRE cosmological simulations", Mercedes-Feliz, J., Anglés-Alcázar, D., Hayward, C. C., et al. 2023, *arXiv e-prints*, arXiv:2301.01784

410. "Realistic H I scale heights of Milky Way-mass galaxies in the FIREbox cosmological volume", Gensior, J., Feldmann, R., Mayer, L., Wetzel, A., Hopkins, P. F., & Faucher-Giguère, C.-A. 2023, *Monthly Notices of the Royal Astronomical Society*, 518, L63

409. "Effects of the environment on the multiplicity properties of stars in the STARFORGE simulations", Guszejnov, D., Raju, A. N., Offner, S. S. R., Grudić, M. Y., Faucher-Giguère, C.-A., Hopkins, P. F., & Rosen, A. L. 2023, *Monthly Notices of the Royal Astronomical Society*, 518, 4693

408. "Hyper-Eddington black hole growth in star-forming molecular clouds and galactic nuclei: can it happen?", Shi, Y., Kremer, K., Grudić, M. Y., Gerling-Dunsmore, H. J., & Hopkins, P. F. 2023, *Monthly Notices of the Royal Astronomical Society*, 518, 3606

407. "TRINITY I: self-consistently modelling the dark matter halo-galaxy-supermassive black hole connection from z = 0-10", Zhang, H., Behroozi, P., Volonteri, M., Silk, J., Fan, X., Hopkins, P. F., Yang, J., & Aird, J. 2023, *Monthly Notices of the Royal Astronomical Society*, 518, 2123

406. "Novel Conservative Methods for Adaptive Force Softening in Collisionless and Multi-Species N-Body Simulations", Hopkins, P. F., Nadler, E. O., Grudic, M. Y., Shen, X., Sands, I., & Jiang, F. 2022, *arXiv e-prints*, arXiv:2212.06851

405. "Structural basis of tankyrase activation by polymerization", Pillay, N., Mariotti, L., Zaleska, M., et al. 2022, *Nature*, 612, 162

404. "Standard self-confinement and extrinsic turbulence models for cosmic ray transport are fundamentally incompatible with observations", Hopkins, P. F., Squire, J., Butsky, I. S., & Ji, S. 2022, *Monthly Notices of the Royal Astronomical Society*, 517, 5413

403. "Orientations of DM Halos in FIRE-2 Milky Way-mass Galaxies", Baptista, J., Sanderson, R., Huber, D., et al. 2022, *arXiv e-prints*, arXiv:2211.16382

402. "A Simple Sub-Grid Model For Cosmic Ray Effects on Galactic Scales", Hopkins, P. F., Butsky, I. S., & Ji, S. 2022, *arXiv e-prints*, arXiv:2211.05811

401. "Dust in the wind with resonant drag instabilities - I. The dynamics of dust-driven outflows in GMCs and H II regions", Hopkins, P. F., Rosen, A. L., Squire, J., Panopoulou, G. V., Soliman, N. H., Seligman, D., & Steinwandel, U. P. 2022, *Monthly Notices of the Royal Astronomical Society*, 517, 1491

400. "The impact of cosmic rays on dynamical balance and disc-halo interaction in L$\star$ disc galaxies", Chan, T. K., Kereš, D., Gurvich, A. B., Hopkins, P. F., Trapp, C., Ji, S., & Faucher-Giguère, C.-A. 2022, *Monthly Notices of the Royal Astronomical Society*, 517, 597

399. "A reduced speed-of-light formulation of the magnetohydrodynamic-particle-in-cell method", Ji, S., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*, 516, 5143

398. "Magnetic fields on FIRE: Comparing B-fields in the multiphase ISM and CGM of simulated L_* galaxies to observations", Ponnada, S. B., Panopoulou, G. V., Butsky, I. S., et al. 2022, *Monthly Notices of the Royal Astronomical Society*, 516, 4417

397. "First predicted cosmic ray spectra, primary-to-secondary ratios, and ionization rates from MHD galaxy formation simulations", Hopkins, P. F., Butsky, I. S., Panopoulou, G. V., Ji, S., Quataert, E., Faucher-Giguère, C.-A., & Kereš, D. 2022, *Monthly Notices of the Royal Astronomical Society*, 516, 3470

396. "Constraining Cosmic-ray Transport with Observations of the Circumgalactic Medium", Butsky, I. S., Nakum, S., Ponnada, S. B., Hummels, C. B., Ji, S., & Hopkins, P. F. 2022, *arXiv e-prints*, arXiv:2210.14232

395. "Dust Dynamics in AGN Winds: A New Mechanism For Multiwavelength AGN Variability", Soliman, N. H., & Hopkins, P. F. 2022, *arXiv e-prints*, arXiv:2210.13517

394. "Born this way: thin disc, thick disc, and isotropic spheroid formation in FIRE-2 Milky-Way-mass galaxy simulations", Yu, S., Bullock, J. S., Gurvich, A. B., et al. 2022, *arXiv e-prints*, arXiv:2210.03845

393. "Shapes of Milky-Way-mass galaxies with self-interacting dark matter", Vargya, D., Sanderson, R., Sameie, O., Boylan-Kolchin, M., Hopkins, P. F., Wetzel, A., & Graus, A. 2022, *Monthly Notices of the Royal Astronomical Society*, 516, 2389

392. "Exploring metallicity-dependent rates of Type Ia supernovae and their impact on galaxy formation", Gandhi, P. J., Wetzel, A., Hopkins, P. F., Shappee, B. J., Wheeler, C., & Faucher-Giguère, C.-A. 2022, *Monthly Notices of the Royal Astronomical Society*, 516, 1941

391. "Effects of the environment and feedback physics on the initial mass function of stars in the STARFORGE simulations", Guszejnov, D., Grudić, M. Y., Offner, S. S. R., Faucher-Giguère, C.-A., Hopkins, P. F., & Rosen, A. L. 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 4929

390. "On the optical properties of resonant drag instabilities: variability of asymptotic giant branch and R Coronae Borealis stars", Steinwandel, U. P., Kaurov, A. A., Hopkins, P. F., & Squire, J. 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 4797

389. "Establishing Dust Rings and Forming Planets within Them", Lee, E. J., Fuentes, J. R., & Hopkins, P. F. 2022, *The Astrophysical Journal*, 937, 95

388. "Spiral Arms are Metal Freeways: Azimuthal Gas-Phase Metallicity Variations in Simulated Cosmological Zoom-in Flocculent Disks", Orr, M. E., Burkhart, B., Wetzel, A., et al. 2022, *arXiv e-prints*, arXiv:2209.14159

387. "Gusts in the Headwind: Uncertainties in direct dark matter detection", Lawrence, G. E., Duffy, A. R., Blake, C. A., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*,

386. "Spatially resolved gas-phase metallicity in FIRE-2 dwarfs: late-time evolution of metallicity relations in simulations with feedback and mergers", Porter, L. E., Orr, M. E., Burkhart, B., Wetzel, A., Ma, X., Hopkins, P. F., & Emerick, A. 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 3555

385. "The observability of galaxy merger signatures in nearby gas-rich spirals", McElroy, R., Bottrell, C., Hani, M. H., et al. 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 3406

384. "Cluster assembly and the origin of mass segregation in the STARFORGE simulations", Guszejnov, D., Markey, C., Offner, S. S. R., Grudić, M. Y., Faucher-Giguère, C.-A., Rosen, A. L., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*, 515, 167

383. "Hot-mode accretion and the physics of thin-disc galaxy formation", Hafen, Z., Stern, J., Bullock, J., et al. 2022, *Monthly Notices of the Royal Astronomical Society*, 514, 5056

382. "The galactic dust-up: modelling dust evolution in FIRE", Choban, C. R., Kereš, D., Hopkins, P. F., Sandstrom, K. M., Hayward, C. C., & Faucher-Giguère, C.-A. 2022, *Monthly Notices of the Royal Astronomical Society*, 514, 4506

381. "Disruption of Dark Matter Minihaloes in the Milky Way environment: Implications for Axion Miniclusters and Early Matter Domination", Shen, X., Xiao, H., Hopkins, P. F., & Zurek, K. M. 2022, *arXiv e-prints*, arXiv:2207.11276

380. "A semi-analytic study of self-interacting dark-matter haloes with baryons", Jiang, F., Benson, A., Hopkins, P. F., et al. 2022, *arXiv e-prints*, arXiv:2206.12425

379. "Dissipative Dark Matter on FIRE: II. Observational signatures and constraints from local dwarf galaxies", Shen, X., Hopkins, P. F., Necib, L., Jiang, F., Boylan-Kolchin, M., & Wetzel, A. 2022, *arXiv e-prints*, arXiv:2206.05327

378. "Numerical study of cosmic ray confinement through dust resonant drag instabilities", Ji, S., Squire, J., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*, 513, 282

377. "Amplified J-factors in the Galactic Centre for velocity-dependent dark matter annihilation in FIRE simulations", McKeown, D., Bullock, J. S., Mercado, F. J., et al. 2022, *Monthly Notices of the Royal Astronomical Society*, 513, 55

376. "The In Situ Origins of Dwarf Stellar Outskirts in FIRE-2", Kado-Fong, E., Sanderson, R. E., Greene, J. E., et al. 2022, *The Astrophysical Journal*, 931, 152

375. "Intermediate massive black hole accretion and feedback in giant molecular clouds", Shi, Y., Hopkins, P., Grudic, M., & Kremer, K. 2022, *American Astronomical Society Meeting Abstracts*, 54, 432.05

374. "Dissipative Dark Matter on FIRE: Structural and kinematic properties of dwarf galaxies and observational constraints", Shen, X., Hopkins, P., Necib, L., Jiang, F., Boylan-Kolchin, M., & Wetzel, A. 2022, *American Astronomical Society Meeting Abstracts*, 54, 347.06

373. "Exploring metallicity-dependent rates of Type Ia supernovae and their impact on galaxy formation", Gandhi, P., Wetzel, A., Hopkins, P., Shappee, B., Wheeler, C., & Faucher-Giguere, C.-A. 2022, *American Astronomical Society Meeting Abstracts*, 54, 317.03

372. "Magnetic Fields on FIRE: Comparing B-fields in the multiphase ISM and CGM of Simulated L_* Galaxies to Observations", Ponnada, S., Panopoulou, G., Butsky, I., Hummels, C., & Hopkins, P. 2022, *American Astronomical Society Meeting Abstracts*, 54, 241.15

371. "A Method to Constrain Cosmic Ray Properties Using Observations of the Circumgalactic Medium", Nakum, S., Butsky, I., Hummels, C., & Hopkins, P. 2022, *American Astronomical Society Meeting Abstracts*, 54, 241.06

370. "Spiral Arms are Metal Freeways: Azimuthal Gas-Phase Metallicity Variations in FIRE-2 Galaxies", Orr, M., Wetzel, A., Hopkins, P., & Burkhart, B. 2022, *American Astronomical Society Meeting Abstracts*, 54, 113.01

369. "Probing Hot Gas Components of the Circumgalactic Medium in Cosmological Simulations with the Thermal Sunyaev-Zel'dovich Effect", Kim, J., Golwala, S., Bartlett, J. G., et al. 2022, *American Astronomical Society Meeting Abstracts*, 54, 106.02

368. "FIREbox: Simulating galaxies at high dynamic range in a cosmological volume", Feldmann, R., Quataert, E., Faucher-Giguère, C.-A., et al. 2022, *arXiv e-prints*, arXiv:2205.15325

367. "The dynamics and outcome of star formation with jets, radiation, winds, and supernovae in concert", Grudić, M. Y., Guszejnov, D., Offner, S. S. R., Rosen, A. L., Raju, A. N., Faucher-Giguère, C.-A., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*, 512, 216

366. "Formation of proto-globular cluster candidates in cosmological simulations of dwarf galaxies at $z > 4$", Sameie, O., Boylan-Kolchin, M., Hopkins, P. F., et al. 2022, *arXiv e-prints*, arXiv:2204.00638

365. "Exploring supermassive black hole physics and galaxy quenching across halo mass in FIRE cosmological zoom simulations", Wellons, S., Faucher-Giguère, C.-A., Hopkins, P. F., et al. 2022, *arXiv e-prints*, arXiv:2203.06201

364. "Black hole-galaxy scaling relations in FIRE: the importance of black hole location and mergers", Çatmabacak, O., Feldmann, R., Anglés-Alcázar, D., Faucher-Giguère, C.-A., Hopkins, P. F., & Kereš, D. 2022, *Monthly Notices of the Royal Astronomical Society*, 511, 506

363. "Public data release of the FIRE-2 cosmological zoom-in simulations of galaxy formation", Wetzel, A., Hayward, C. C., Sanderson, R. E., et al. 2022, *arXiv e-prints*, arXiv:2202.06969

362. "Why do black holes trace bulges (& central surface densities), instead of galaxies as a whole?", Hopkins, P. F., Wellons, S., Anglés-Alcázar, D., Faucher-Giguère, C.-A., & Grudić, M. Y. 2022, *Monthly Notices of the Royal Astronomical Society*, 510, 630

361. "The acoustic resonant drag instability with a spectrum of grain sizes", Squire, J., Moroianu, S., & Hopkins, P. F. 2022, *Monthly Notices of the Royal Astronomical Society*, 510, 110

360. "Probing Hot Gas Components of the Circumgalactic Medium in Cosmological Simulations with the Thermal Sunyaev-Zel'dovich Effect", Kim, J., Golwala, S., Bartlett, J. G., et al. 2022, *The Astrophysical Journal*, 926, 179

359. "VizieR Online Data Catalog: HST NIR grism sp. of strong-lensing galaxy clusters (Wang+, 2020)", Wang, X., Jones, T. A., Treu, T., et al. 2022, *VizieR Online Data Catalog*, J/ApJ/900/183

358. "Gas infall and radial transport in cosmological simulations of milky way-mass discs", Trapp, C. W., Kereš, D., Chan, T. K., et al. 2022, *Monthly Notices of the Royal Astronomical Society*, 509, 4149

357. "A consistent reduced-speed-of-light formulation of cosmic ray transport valid in weak- and strong-scattering regimes", Hopkins, P. F., Squire, J., & Butsky, I. S. 2022, *Monthly Notices of the Royal Astronomical Society*, 509, 3779

356. "Characterizing mass, momentum, energy, and metal outflow rates of multiphase galactic winds in the FIRE-2 cosmological simulations", Pandya, V., Fielding, D. B., Anglés-Alcázar, D., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 508, 2979

355. "Seeds don't sink: even massive black hole 'seeds' cannot migrate to galaxy centres efficiently", Ma, L., Hopkins, P. F., Ma, X., Anglés-Alcázar, D., Faucher-Giguère, C.-A., & Kelley, L. Z. 2021, *Monthly Notices of the Royal Astronomical Society*, 508, 1973

354. "Progenitor-mass-dependent yields amplify intrinsic scatter in dwarf-galaxy elemental abundance ratios", Muley, D. A., Wheeler, C. R., Hopkins, P. F., Wetzel, A., Emerick, A., & Kereš, D. 2021, *Monthly Notices of the Royal Astronomical Society*, 508, 508

353. "Neutral CGM as damped Ly α absorbers at high redshift", Stern, J., Sternberg, A., Faucher-Giguère, C.-A., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 507, 2869

352. "The central densities of Milky Way-mass galaxies in cold and self-interacting dark matter models", Sameie, O., Boylan-Kolchin, M., Sanderson, R., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 507, 720

351. "Which AGN jets quench star formation in massive galaxies?", Su, K.-Y., Hopkins, P. F., Bryan, G. L., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 507, 175

350. "Dissipative dark matter on FIRE - I. Structural and kinematic properties of dwarf galaxies", Shen, X., Hopkins, P. F., Necib, L., Jiang, F., Boylan-Kolchin, M., & Wetzel, A. 2021, *Monthly Notices of the Royal Astronomical Society*, 506, 4421

349. "A model for the formation of stellar associations and clusters from giant molecular clouds", Grudić, M. Y., Kruijssen, J. M. D., Faucher-Giguère, C.-A., Hopkins, P. F., Ma, X., Quataert, E., & Boylan-Kolchin, M. 2021, *Monthly Notices of the Royal Astronomical Society*, 506, 3239

348. "STARFORGE: Towards a comprehensive numerical model of star cluster formation and feedback", Grudić, M. Y., Guszejnov, D., Hopkins, P. F., Offner, S. S. R., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 506, 2199

347. "The mass budget for intermediate-mass black holes in dense star clusters", Shi, Y., Grudić, M. Y., & Hopkins, P. F. 2021, *Monthly Notices of the Royal Astronomical Society*, 505, 2753

346. "Cosmological Simulations of Quasar Fueling to Subparsec Scales Using Lagrangian Hyper-refinement", Anglés-Alcázar, D., Quataert, E., Hopkins, P. F., et al. 2021, *The Astrophysical Journal*, 917, 53

345. "The bursty origin of the Milky Way thick disc", Yu, S., Bullock, J. S., Klein, C., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 505, 889

344. "Virial shocks are suppressed in cosmic ray-dominated galaxy haloes", Ji, S., Kereš, D., Chan, T. K., Stern, J., Hummels, C. B., Hopkins, P. F., Quataert, E., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 505, 259

343. "First light from tidal disruption events", Bonnerot, C., Lu, W., & Hopkins, P. F. 2021, *Monthly Notices of the Royal Astronomical Society*, 504, 4885

342. "Planes of satellites around Milky Way/M31-mass galaxies in the FIRE simulations and comparisons with the Local Group", Samuel, J., Wetzel, A., Chapman, S., Tollerud, E., Hopkins, P. F., Boylan-Kolchin, M., Bailin, J., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 504, 1379

341. "Spatially resolved star formation and fuelling in galaxy interactions", Moreno, J., Torrey, P., Ellison, S. L., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 503, 3113

340. "STARFORGE: the effects of protostellar outflows on the IMF", Guszejnov, D., Grudić, M. Y., Hopkins, P. F., Offner, S. S. R., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 3646

339. "The IRX-β relation of high-redshift galaxies", Liang, L., Feldmann, R., Hayward, C. C., Narayanan, D., Çatmabacak, O., Kereš, D., Faucher-Giguère, C.-A., & Hopkins, P. F. 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 3210

338. "The impact of astrophysical dust grains on the confinement of cosmic rays", Squire, J., Hopkins, P. F., Quataert, E., & Kempski, P. 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 2630

337. "Erratum: The Keck Baryonic Structure Survey: using foreground/background galaxy pairs to trace the structure and kinematics of circumgalactic neutral hydrogen at z $\sim$ 2", Chen, Y., Steidel, C. C., Hummels, C. B., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 1702

336. "Virialization of the Inner CGM in the FIRE Simulations and Implications for Galaxy Disks, Star Formation, and Feedback", Stern, J., Faucher-Giguère, C.-A., Fielding, D., et al. 2021, *The Astrophysical Journal*, 911, 88

335. "SatGen: a semi-analytical satellite galaxy generator - I. The model and its application to Local-Group satellite statistics", Jiang, F., Dekel, A., Freundlich, J., van den Bosch, F. C., Green, S. B., Hopkins, P. F., Benson, A., & Du, X. 2021, *Monthly Notices of the Royal Astronomical Society*, 502, 621

334. "A relationship between stellar metallicity gradients and galaxy age in dwarf galaxies", Mercado, F. J., Bullock, J. S., Boylan-Kolchin, M., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 501, 5121

333. "Testing physical models for cosmic ray transport coefficients on galactic scales: self-confinement and extrinsic turbulence at $\sim$GeV energies", Hopkins, P. F., Squire, J., Chan, T. K., Quataert, E., Ji, S., Kereš, D., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 501, 4184

332. "Effects of different cosmic ray transport models on galaxy formation", Hopkins, P. F., Chan, T. K., Squire, J., Quataert, E., Ji, S., Kereš, D., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 501, 3663

331. "Cosmic ray driven outflows to Mpc scales from L_* galaxies", Hopkins, P. F., Chan, T. K., Ji, S., Hummels, C. B., Kereš, D., Quataert, E., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 501, 3640

330. "The Origin and Evolution of Lyα Blobs in Cosmological Galaxy Formation Simulations", Kimock, B., Narayanan, D., Smith, A., et al. 2021, *The Astrophysical Journal*, 909, 119

329. "Realistic mock observations of the sizes and stellar mass surface densities of massive galaxies in FIRE-2 zoom-in simulations", Parsotan, T., Cochrane, R. K., Hayward, C. C., Anglés-Alcázar, D., Feldmann, R., Faucher-Giguère, C. A., Wellons, S., & Hopkins, P. F. 2021, *Monthly Notices of the Royal Astronomical Society*, 501, 1591

328. "Fiery Cores: Bursty and Smooth Star Formation Distributions across Galaxy Centers in Cosmological Zoom-in Simulations", Orr, M. E., Hatchfield, H. P., Battersby, C., et al. 2021, *The Astrophysical Journal*, 908, L31

327. "Erratum: Can magnetized turbulence set the mass scale of stars?", Guszejnov, D., Grudić, M. Y., Hopkins, P. F., Offner, S. S. R., & Faucher-Giguère, C.-A. 2021, *Monthly Notices of the Royal Astronomical Society*, 500, 1125

326. "Probing the CGM of low-redshift dwarf galaxies using FIRE simulations", Li, F., Rahman, M., Murray, N., et al. 2021, *Monthly Notices of the Royal Astronomical Society*, 500, 1038

325. "The Keck Baryonic Structure Survey: using foreground/background galaxy pairs to trace the structure and kinematics of circumgalactic neutral hydrogen at z 2", Chen, Y., Steidel, C. C., Hummels, C. B., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 499, 1721

324. "Reproducing the CO-to-H_2 conversion factor in cosmological simulations of Milky-Way-mass galaxies", Keating, L. C., Richings, A. J., Murray, N., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 499, 837

323. "Pressure balance in the multiphase ISM of cosmologically simulated disc galaxies", Gurvich, A. B., Faucher-Giguère, C.-A., Richings, A. J., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 498, 3664

322. "No missing photons for reionization: moderate ionizing photon escape fractions from the FIRE-2 simulations", Ma, X., Quataert, E., Wetzel, A., Hopkins, P. F., Faucher-Giguère, C.-A., & Kereš, D. 2020, *Monthly Notices of the Royal Astronomical Society*, 498, 2001

321. "Physical models of streaming instabilities in protoplanetary discs", Squire, J., & Hopkins, P. F. 2020, *Monthly Notices of the Royal Astronomical Society*, 498, 1239

320. "The impact of AGN wind feedback in simulations of isolated galaxies with a multiphase ISM", Torrey, P., Hopkins, P. F., Faucher-Giguère, C.-A., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 497, 5292

319. "Measuring dynamical masses from gas kinematics in simulated high-redshift galaxies", Wellons, S., Faucher-Giguère, C.-A., Anglés-Alcázar, D., Hayward, C. C., Feldmann, R., Hopkins, P. F., & Kereš, D. 2020, *Monthly Notices of the Royal Astronomical Society*, 497, 4051

318. "Live fast, die young: GMC lifetimes in the FIRE cosmological simulations of Milky Way mass galaxies", Benincasa, S. M., Loebman, S. R., Wetzel, A., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 497, 3993

317. "A dark matter profile to model diverse feedback-induced core sizes of ΛCDM haloes", Lazar, A., Bullock, J. S., Boylan-Kolchin, M., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 497, 2393

316. "A Census of Sub-kiloparsec Resolution Metallicity Gradients in Star-forming Galaxies at Cosmic Noon from HST Slitless Spectroscopy", Wang, X., Jones, T. A., Treu, T., et al. 2020, *The Astrophysical Journal*, 900, 183

315. "Can magnetized turbulence set the mass scale of stars?", Guszejnov, D., Grudić, M. Y., Hopkins, P. F., Offner, S. S. R., & Faucher-Giguère, C.-A. 2020, *Monthly Notices of the Royal Astronomical Society*, 496, 5072

314. "Properties of the circumgalactic medium in cosmic ray-dominated galaxy haloes", Ji, S., Chan, T. K., Hummels, C. B., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 496, 4221

313. "Simulating diverse instabilities of dust in magnetized gas", Hopkins, P. F., Squire, J., & Seligman, D. 2020, *Monthly Notices of the Royal Astronomical Society*, 496, 2123

312. "Swirls of FIRE: spatially resolved gas velocity dispersions and star formation rates in FIRE-2 disc environments", Orr, M. E., Hayward, C. C., Medling, A. M., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 496, 1620

311. "The universal acceleration scale from stellar feedback", Grudić, M. Y., Boylan-Kolchin, M., Faucher-Giguère, C.-A., & Hopkins, P. F. 2020, *Monthly Notices of the Royal Astronomical Society*, 496, L127

310. "A general-purpose time-step criterion for simulations with gravity", Grudić, M. Y., & Hopkins, P. F. 2020, *Monthly Notices of the Royal Astronomical Society*, 495, 4306

309. "Most stars (and planets?) are born in intense radiation fields", Lee, E. J., & Hopkins, P. F. 2020, *Monthly Notices of the Royal Astronomical Society*, 495, L86

308. "Stars made in outflows may populate the stellar halo of the Milky Way", Yu, S., Bullock, J. S., Wetzel, A., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 494, 1539

307. "Self-consistent proto-globular cluster formation in cosmological simulations of high-redshift galaxies", Ma, X., Grudić, M. Y., Quataert, E., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 493, 4315

306. "But what about...: cosmic rays, magnetic fields, conduction, and viscosity in galaxy formation", Hopkins, P. F., Chan, T. K., Garrison-Kimmel, S., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 492, 3465

305. "On the survival of cool clouds in the circumgalactic medium", Li, Z., Hopkins, P. F., Squire, J., & Hummels, C. 2020, *Monthly Notices of the Royal Astronomical Society*, 492, 1841

304. "The bolometric quasar luminosity function at z = 0-7", Shen, X., Hopkins, P. F., Faucher-Giguère, C.-A., Alexander, D. M., Richards, G. T., Ross, N. P., & Hickox, R. C. 2020, *Monthly Notices of the Royal Astronomical Society*, 495, 3252

303. "Radiative stellar feedback in galaxy formation: Methods and physics", Hopkins, P. F., Grudić, M. Y., Wetzel, A., Kereš, D., Faucher-Giguère, C.-A., Ma, X., Murray, N., & Butcher, N. 2020, *Monthly Notices of the Royal Astronomical Society*, 491, 3702

302. "A profile in FIRE: resolving the radial distributions of satellite galaxies in the Local Group with simulations", Samuel, J., Wetzel, A., Tollerud, E., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 491, 1471

301. "Cosmic rays or turbulence can suppress cooling flows (where thermal heating or momentum injection fail)", Su, K.-Y., Hopkins, P. F., Hayward, C. C., et al. 2020, *Monthly Notices of the Royal Astronomical Society*, 491, 1190

300. "Extreme variations in star formation activity in the first galaxies", Binggeli, C., Zackrisson, E., Ma, X., et al. 2020, *Panchromatic Modelling with Next Generation Facilities*, 341, 226

299. "Synthetic Gaia Surveys from the FIRE Cosmological Simulations of Milky Way-mass Galaxies", Sanderson, R. E., Wetzel, A., Loebman, S., et al. 2020, *The Astrophysical Journal Supplement Series*, 246, 6

298. "Astro2020 APC White Paper: Theoretical Astrophysics 2020-2030", Kollmeier, J. A., Anderson, L., Benson, A., et al. 2019, *arXiv e-prints*, arXiv:1912.09992

297. "Star formation at the edge of the Local Group: a rising star formation history in the isolated galaxy WLM", Albers, S. M., Weisz, D. R., Cole, A. A., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 490, 5538

296. "Be it therefore resolved: cosmological simulations of dwarf galaxies with 30 solar mass resolution", Wheeler, C., Hopkins, P. F., Pace, A. B., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 490, 4447

295. "High-redshift Galaxy Formation with Self-consistently Modeled Stars and Massive Black Holes: Stellar Feedback and Quasar Growth", Kim, J.-. hoon ., Wise, J. H., Abel, T., Jo, Y., Primack, J. R., & Hopkins, P. F. 2019, *The Astrophysical Journal*, 887, 120

294. "A predicted correlation between age gradient and star formation history in FIRE dwarf galaxies", Graus, A. S., Bullock, J. S., Fitts, A., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 490, 1186

293. "Dwarf galaxies in CDM, WDM, and SIDM: disentangling baryons and dark matter physics", Fitts, A., Boylan-Kolchin, M., Bozek, B., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 490, 962

292. "Star formation histories of dwarf galaxies in the FIRE simulations: dependence on mass and Local Group environment", Garrison-Kimmel, S., Wetzel, A., Hopkins, P. F., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 489, 4574

291. "A stable finite-volume method for scalar field dark matter", Hopkins, P. F. 2019, *Monthly Notices of the Royal Astronomical Society*, 489, 2367

290. "On the dust temperatures of high-redshift galaxies", Liang, L., Feldmann, R., Kereš, D., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 489, 1397

289. "Non-linear evolution of instabilities between dust and sound waves", Moseley, E. R., Squire, J., & Hopkins, P. F. 2019, *Monthly Notices of the Royal Astronomical Society*, 489, 325

288. "Cosmic ray feedback in the FIRE simulations: constraining cosmic ray propagation with GeV γ-ray emission", Chan, T. K., Kereš, D., Hopkins, P. F., Quataert, E., Su, K.-Y., Hayward, C. C., & Faucher-Giguère, C.-A. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 3716

287. "The elephant in the room: the importance of the details of massive star formation in molecular clouds", Grudić, M. Y., & Hopkins, P. F. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 2970

286. "Predictions for the spatial distribution of the dust continuum emission in $1 < z < 5$ star-forming galaxies", Cochrane, R. K., Hayward, C. C., Anglés-Alcázar, D., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 1779

285. "On the nature of variations in the measured star formation efficiency of molecular clouds", Grudić, M. Y., Hopkins, P. F., Lee, E. J., Murray, N., Faucher-Giguère, C.-A., & Johnson, L. C. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 1501

284. "The origins of the circumgalactic medium in the FIRE simulations", Hafen, Z., Faucher-Giguère, C.-A., Anglés-Alcázar, D., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 1248

283. "Under the FIRElight: Stellar Tracers of the Local Dark Matter Velocity Distribution in the Milky Way", Necib, L., Lisanti, M., Garrison-Kimmel, S., Wetzel, A., Sanderson, R., Hopkins, P. F., Faucher-Giguère, C.-A., & Kereš, D. 2019, *The Astrophysical Journal*, 883, 27

282. "The Impact of Enhanced Halo Resolution on the Simulated Circumgalactic Medium", Hummels, C. B., Smith, B. D., Hopkins, P. F., et al. 2019, *The Astrophysical Journal*, 882, 156

281. "The Radial Acceleration Relation Is a Natural Consequence of the Baryonic Tully-Fisher Relation", Wheeler, C., Hopkins, P. F., & Doré, O. 2019, *The Astrophysical Journal*, 882, 46

280. "The failure of stellar feedback, magnetic fields, conduction, and morphological quenching in maintaining red galaxies", Su, K.-Y., Hopkins, P. F., Hayward, C. C., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 487, 4393

279. "Dust attenuation, dust emission, and dust temperature in galaxies at z $\geq$ 5: a view from the FIRE-2 simulations", Ma, X., Hayward, C. C., Casey, C. M., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 487, 1844

278. "The Local Group on FIRE: dwarf galaxy populations across a suite of hydrodynamic simulations", Garrison-Kimmel, S., Hopkins, P. F., Wetzel, A., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 487, 1380

277. "A simple non-equilibrium feedback model for galaxy-scale star formation: delayed feedback and SFR scatter", Orr, M. E., Hayward, C. C., & Hopkins, P. F. 2019, *Monthly Notices of the Royal Astronomical Society*, 486, 4724

276. "Formation, vertex deviation, and age of the Milky Way's bulge: input from a cosmological simulation with a late-forming bar", Debattista, V. P., Gonzalez, O. A., Sanderson, R. E., El-Badry, K., Garrison-Kimmel, S., Wetzel, A., Faucher-Giguère, C.-A., & Hopkins, P. F. 2019, *Monthly Notices of the Royal Astronomical Society*, 485, 5073

275. "Is it possible to reconcile extragalactic IMF variations with a universal Milky Way IMF?", Guszejnov, D., Hopkins, P. F., & Graus, A. S. 2019, *Monthly Notices of the Royal Astronomical Society*, 485, 4852

274. "Non-linear evolution of the resonant drag instability in magnetized gas", Seligman, D., Hopkins, P. F., & Squire, J. 2019, *Monthly Notices of the Royal Astronomical Society*, 485, 3991

273. "Interacting galaxies on FIRE-2: the connection between enhanced star formation and interstellar gas content", Moreno, J., Torrey, P., Ellison, S. L., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 485, 1320

272. "The robustness of cosmological hydrodynamic simulation predictions to changes in numerics and cooling physics", Huang, S., Katz, N., Davé, R., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 484, 2021

271. "Local Simulations of MRI turbulence with Meshless Methods", Deng, H., Mayer, L., Latter, H., Hopkins, P. F., & Bai, X.-N. 2019, *The Astrophysical Journal Supplement Series*, 241, 26

270. "The physics of Lyman α escape from high-redshift galaxies", Smith, A., Ma, X., Bromm, V., Finkelstein, S. L., Hopkins, P. F., Faucher-Giguère, C.-A., & Kereš, D. 2019, *Monthly Notices of the Royal Astronomical Society*, 484, 39

269. "The maximum stellar surface density due to the failure of stellar feedback", Grudić, M. Y., Hopkins, P. F., Quataert, E., & Murray, N. 2019, *Monthly Notices of the Royal Astronomical Society*, 483, 5548

268. "Numerical problems in coupling photon momentum (radiation pressure) to gas", Hopkins, P. F., & Grudić, M. Y. 2019, *Monthly Notices of the Royal Astronomical Society*, 483, 4187

267. "Warm FIRE: simulating galaxy formation with resonant sterile neutrino dark matter", Bozek, B., Fitts, A., Boylan-Kolchin, M., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 483, 4086

266. "Dynamic localized turbulent diffusion and its impact on the galactic ecosystem", Rennehan, D., Babul, A., Hopkins, P. F., Davé, R., & Moa, B. 2019, *Monthly Notices of the Royal Astronomical Society*, 483, 3810

265. "What drives the evolution of gas kinematics in star-forming galaxies?", Hung, C.-L., Hayward, C. C., Yuan, T., et al. 2019, *Monthly Notices of the Royal Astronomical Society*, 482, 5125

264. "Effects of Gas on Formation and Evolution of Stellar Bars and Nuclear Rings in Disk Galaxies", Seo, W.-Y., Kim, W.-T., Kwak, S., Hsieh, P.-Y., Han, C., & Hopkins, P. F. 2019, *The Astrophysical Journal*, 872, 5

263. "Spatially Resolved Star Formation Scaling Relations in Cosmological Simulations", Orr, M., & Hopkins, P. 2019, *American Astronomical Society Meeting Abstracts #233*, 233, 108.02

262. "The origin of the diverse morphologies and kinematics of Milky Way-mass galaxies in the FIRE-2 simulations", Garrison-Kimmel, S., Hopkins, P. F., Wetzel, A., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 481, 4133

261. "Reconciling Observed and Simulated Stellar Halo Masses", Sanderson, R. E., Garrison-Kimmel, S., Wetzel, A., et al. 2018, *The Astrophysical Journal*, 869, 12

260. "From the top down and back up again: star cluster structure from hierarchical star formation", Grudić, M. Y., Guszejnov, D., Hopkins, P. F., Lamberts, A., Boylan-Kolchin, M., Murray, N., & Schmitz, D. 2018, *Monthly Notices of the Royal Astronomical Society*, 481, 688

259. "The resonant drag instability (RDI): acoustic modes", Hopkins, P. F., & Squire, J. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 2813

258. "Predicting the binary black hole population of the Milky Way with cosmological simulations", Lamberts, A., Garrison-Kimmel, S., Hopkins, P. F., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 2704

257. "Discrete effects in stellar feedback: Individual Supernovae, Hypernovae, and IMF Sampling in Dwarf Galaxies", Su, K.-Y., Hopkins, P. F., Hayward, C. C., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 1666

256. "FIRE-2 simulations: physics versus numerics in galaxy formation", Hopkins, P. F., Wetzel, A., Kereš, D., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 800

255. "Where are the most ancient stars in the Milky Way?", El-Badry, K., Bland-Hawthorn, J., Wetzel, A., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 652

254. "Isothermal Fragmentation: Is there a low-mass cut-off?", Guszejnov, D., Hopkins, P. F., Grudić, M. Y., Krumholz, M. R., & Federrath, C. 2018, *Monthly Notices of the Royal Astronomical Society*, 480, 182

253. "Ubiquitous instabilities of dust moving in magnetized gas", Hopkins, P. F., & Squire, J. 2018, *Monthly Notices of the Royal Astronomical Society*, 479, 4681

252. "No assembly required: mergers are mostly irrelevant for the growth of low-mass dwarf galaxies", Fitts, A., Boylan-Kolchin, M., Bullock, J. S., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 479, 319

251. "Erratum: "Evolution of Intrinsic Scatter in the SFR-Stellar Mass Correlation at $0.5 < z < 3$" (¡A href="http://doi.org/10.3847/2 8205/820/1/l1"¿2016, ApJL, 820, L1¡/A¿)", Kurczynski, P., Gawiser, E., Acquaviva, V., et al. 2018, *The Astrophysical Journal*, 864, L42

250. "What FIREs up star formation: the emergence of the Kennicutt-Schmidt law from feedback", Orr, M. E., Hayward, C. C., Hopkins, P. F., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 478, 3653

249. "Simulating galaxies in the reionization era with FIRE-2: galaxy scaling relations, stellar mass functions, and luminosity functions", Ma, X., Hopkins, P. F., Garrison-Kimmel, S., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 478, 1694

248. "Submillimetre flux as a probe of molecular ISM mass in high-z galaxies", Liang, L., Feldmann, R., Faucher-Giguère, C.-A., Kereš, D., Hopkins, P. F., Hayward, C. C., Quataert, E., & Scoville, N. Z. 2018, *Monthly Notices of the Royal Astronomical Society*, 478, L83

247. "The origin of ultra diffuse galaxies: stellar feedback and quenching", Chan, T. K., Kereš, D., Wetzel, A., Hopkins, P. F., Faucher-Giguère, C.-A., El-Badry, K., Garrison-Kimmel, S., & Boylan-Kolchin, M. 2018, *Monthly Notices of the Royal Astronomical Society*, 478, 906

246. "Universal scaling relations in scale-free structure formation", Guszejnov, D., Hopkins, P. F., & Grudić, M. Y. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 5139

245. "Resonant drag instabilities in protoplanetary discs: the streaming instability and new, faster growing instabilities", Squire, J., & Hopkins, P. F. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 5011

244. "How to model supernovae in simulations of star and galaxy formation", Hopkins, P. F., Wetzel, A., Kereš, D., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 1578

243. "Gas kinematics in FIRE simulated galaxies compared to spatially unresolved H I observations", El-Badry, K., Bradford, J., Quataert, E., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 1536

242. "Simulating galaxies in the reionization era with FIRE-2: morphologies and sizes", Ma, X., Hopkins, P. F., Boylan-Kolchin, M., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 219

241. "On the deuterium abundance and the importance of stellar mass loss in the interstellar and intergalactic medium", van de Voort, F., Quataert, E., Faucher-Giguère, C.-A., Kereš, D., Hopkins, P. F., Chan, T. K., Feldmann, R., & Hafen, Z. 2018, *Monthly Notices of the Royal Astronomical Society*, 477, 80

240. "A Simple Non-equilibrium Model of Star Formation and Scatter in the Kennicutt-Schmidt Relation and Star Formation Efficiencies in Galaxies", Orr, M., & Hopkins, P. F. 2018, *American Astronomical Society Meeting Abstracts #232*, 232, 103.07

239. "When feedback fails: the scaling and saturation of star formation efficiency", Grudić, M. Y., Hopkins, P. F., Faucher-Giguère, C.-A., Quataert, E., Murray, N., & Kereš, D. 2018, *Monthly Notices of the Royal Astronomical Society*, 475, 3511

238. "The effects of metallicity and cooling physics on fragmentation: implications on direct-collapse black hole formation", Corbett Moran, C., Grudić, M. Y., & Hopkins, P. F. 2018, *arXiv e-prints*, arXiv:1803.06430

237. "Formation of globular cluster candidates in merging proto-galaxies at high redshift: a view from the FIRE cosmological simulations", Kim, J.-. hoon ., Ma, X., Grudić, M. Y., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 474, 4232

236. "Resonant Drag Instability of Grains Streaming in Fluids", Squire, J., & Hopkins, P. F. 2018, *The Astrophysical Journal*, 856, L15

235. "SDSS-IV MaNGA: constraints on the conditions for star formation in galaxy discs", Stark, D. V., Bundy, K. A., Orr, M. E., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 474, 2323

234. "Modelling chemical abundance distributions for dwarf galaxies in the Local Group: the impact of turbulent metal diffusion", Escala, I., Wetzel, A., Kirby, E. N., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 474, 2194

233. "Stellar feedback strongly alters the amplification and morphology of galactic magnetic fields", Su, K.-Y., Hayward, C. C., Hopkins, P. F., Quataert, E., Faucher-Giguère, C.-A., & Kereš, D. 2018, *Monthly Notices of the Royal Astronomical Society*, 473, L111

232. "Gas kinematics, morphology and angular momentum in the FIRE simulations", El-Badry, K., Quataert, E., Wetzel, A., et al. 2018, *Monthly Notices of the Royal Astronomical Society*, 473, 1930

231. "Star Cluster Structure from Hierarchical Star Formation", Grudic, M., Hopkins, P., Murray, N., Lamberts, A., Guszejnov, D., Schmitz, D., & Boylan-Kolchin, M. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 449.06

230. "Gaia reveals a metal-rich in-situ component of the local stellar halo", Bonaca, A., Conroy, C., Wetzel, A., Hopkins, P., & Keres, D. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 411.03

229. "Star Cluster Structure from Hierarchical Star Formation", Grudic, M., Guszejnov, D., Hopkins, P., Lamberts, A., Boylan-Kolchin, M., Murray, N., & Schmitz, D. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 313.06

228. "Effects of gas on the formation and evolution of a bar in Milky-Way sized galaxies", Seo, W.-Y., Kim, W.-T., & Hopkins, P. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 257.14

227. "Star Formation in Merging Galaxies Using FIRE", Perez, A., Hung, C.-L., Naiman, J., Moreno, J., & Hopkins, P. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 149.54

226. "The Origin of Scales and Scaling Laws in Star Formation", Guszejnov, D., Hopkins, P., & Grudich, M. 2018, *American Astronomical Society Meeting Abstracts #231*, 231, 114.03

225. "A New Public Release of the GIZMO Code", Hopkins, P. F. 2017, *arXiv e-prints*, arXiv:1712.01294

224. "Dwarf galaxy mass estimators versus cosmological simulations", González-Samaniego, A., Bullock, J. S., Boylan-Kolchin, M., Fitts, A., Elbert, O. D., Hopkins, P. F., Kereš, D., & Faucher-Giguère, C.-A. 2017, *Monthly Notices of the Royal Astronomical Society*, 472, 4786

223. "SIDM on FIRE: hydrodynamical self-interacting dark matter simulations of low-mass dwarf galaxies", Robles, V. H., Bullock, J. S., Elbert, O. D., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 472, 2945

222. "Comparing models for IMF variation across cosmological time in Milky Way-like galaxies", Guszejnov, D., Hopkins, P. F., & Ma, X. 2017, *Monthly Notices of the Royal Astronomical Society*, 472, 2107

221. "Black holes on FIRE: stellar feedback limits early feeding of galactic nuclei", Anglés-Alcázar, D., Faucher-Giguère, C.-A., Quataert, E., Hopkins, P. F., Feldmann, R., Torrey, P., Wetzel, A., & Kereš, D. 2017, *Monthly Notices of the Royal Astronomical Society*, 472, L109

220. "The distribution of density in supersonic turbulence", Squire, J., & Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 3753

219. "fire in the field: simulating the threshold of galaxy formation", Fitts, A., Boylan-Kolchin, M., Elbert, O. D., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 3547

218. "Stacked Star Formation Rate Profiles of Bursty Galaxies Exhibit "Coherent" Star Formation", Orr, M. E., Hayward, C. C., Nelson, E. J., et al. 2017, *The Astrophysical Journal*, 849, L2

217. "Not so lumpy after all: modelling the depletion of dark matter subhaloes by Milky Way-like galaxies", Garrison-Kimmel, S., Wetzel, A., Bullock, J. S., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 1709

216. "Feedback first: the surprisingly weak effects of magnetic fields, viscosity, conduction and metal diffusion on sub-L* galaxy formation", Su, K.-Y., Hopkins, P. F., Hayward, C. C., Faucher-Giguère, C.-A., Kereš, D., Ma, X., & Robles, V. H. 2017, *Monthly Notices of the Royal Astronomical Society*, 471, 144

215. "The cosmic baryon cycle and galaxy mass assembly in the FIRE simulations", Anglés-Alcázar, D., Faucher-Giguère, C.-A., Kereš, D., Hopkins, P. F., Quataert, E., & Murray, N. 2017, *Monthly Notices of the Royal Astronomical Society*, 470, 4698

214. "Colours, star formation rates and environments of star-forming and quiescent galaxies at the cosmic noon", Feldmann, R., Quataert, E., Hopkins, P. F., Faucher-Giguère, C.-A., & Kereš, D. 2017, *Monthly Notices of the Royal Astronomical Society*, 470, 1050

213. "The dynamics of charged dust in magnetized molecular clouds", Lee, H., Hopkins, P. F., & Squire, J. 2017, *Monthly Notices of the Royal Astronomical Society*, 469, 3532

212. "Low-redshift Lyman limit systems as diagnostics of cosmological inflows and outflows", Hafen, Z., Faucher-Giguère, C.-A., Anglés-Alcázar, D., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 469, 2292

211. "Better Galactic Mass Models through Chemistry", Sanderson, R., Wetzel, A., Sharma, S., & Hopkins, P. 2017, *Galaxies*, 5, 43

210. "Gaia Reveals a Metal-rich, in situ Component of the Local Stellar Halo", Bonaca, A., Conroy, C., Wetzel, A., Hopkins, P. F., & Kereš, D. 2017, *The Astrophysical Journal*, 845, 101

209. "Metal flows of the circumgalactic medium, and the metal budget in galactic haloes", Muratov, A. L., Kereš, D., Faucher-Giguère, C.-A., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 468, 4170

208. "Protostellar feedback in turbulent fragmentation: consequences for stellar clustering and multiplicity", Guszejnov, D., Hopkins, P. F., & Krumholz, M. R. 2017, *Monthly Notices of the Royal Astronomical Society*, 468, 4093

207. "Testing the Recovery of Intrinsic Galaxy Sizes and Masses of z $\sim$ 2 Massive Galaxies Using Cosmological Simulations", Price, S. H., Kriek, M., Feldmann, R., Quataert, E., Hopkins, P. F., Faucher-Giguère, C.-A., Kereš, D., & Barro, G. 2017, *The Astrophysical Journal*, 844, L6

206. "High Angular Momentum Halo Gas: A Feedback and Code-independent Prediction of LCDM", Stewart, K. R., Maller, A. H., Oñorbe, J., et al. 2017, *The Astrophysical Journal*, 843, 47

205. "Forward and backward galaxy evolution in comoving cumulative number density space", Torrey, P., Wellons, S., Ma, C.-P., Hopkins, P. F., & Vogelsberger, M. 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 4872

204. "When Feedback Fails: The Scaling and Saturation of Star Formation Efficiency", Y Grudic, M., Hopkins, P. F., Faucher-Giguere, C.-A., Quataert, E., Murray, N. W., & Keres, D. 2017, *American Astronomical Society Meeting Abstracts #230*, 230, 307.03

203. "The structure and dynamical evolution of the stellar disc of a simulated Milky Way-mass galaxy", Ma, X., Hopkins, P. F., Wetzel, A. R., Kirby, E. N., Anglés-Alcázar, D., Faucher-Giguère, C.-A., Kereš, D., & Quataert, E. 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 2430

202. "Scaling laws of passive-scalar diffusion in the interstellar medium", Colbrook, M. J., Ma, X., Hopkins, P. F., & Squire, J. 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 2421

201. "An instability of feedback-regulated star formation in galactic nuclei", Torrey, P., Hopkins, P. F., Faucher-Giguère, C.-A., Vogelsberger, M., Quataert, E., Kereš, D., & Murray, N. 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 2301

200. "MUFASA: Galaxy star formation, gas, and metal properties across cosmic time", Davé, R., Rafieferantsoa, M. H., Thompson, R. J., & Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 467, 115

199. "Converging on the Initial Mass Function of Stars", Federrath, C., Krumholz, M., & Hopkins, P. F. 2017, *Journal of Physics Conference Series*, 837, 012007

198. "VizieR Online Data Catalog: CANDELS z~2 galaxy properties (Trump+, 2014)", Trump, J. R., Barro, G., Juneau, S., et al. 2017, *VizieR Online Data Catalog*, J/ApJ/793/101

197. "Supernovae, supercomputers, and galactic evolution", Hopkins, P. F. 2017, *Physics Today*, 70, 70

196. "Why do high-redshift galaxies show diverse gas-phase metallicity gradients?", Ma, X., Hopkins, P. F., Feldmann, R., Torrey, P., Faucher-Giguère, C.-A., & Kereš, D. 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 4780

195. "Anisotropic diffusion in mesh-free numerical magnetohydrodynamics", Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 3387

194. "(Star)bursts of FIRE: observational signatures of bursty star formation in galaxies", Sparre, M., Hayward, C. C., Feldmann, R., Faucher-Giguère, C.-A., Muratov, A. L., Kereš, D., & Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 466, 88

193. "The no-spin zone: rotation versus dispersion support in observed and simulated dwarf galaxies", Wheeler, C., Pace, A. B., Bullock, J. S., et al. 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 2420

192. "How stellar feedback simultaneously regulates star formation and drives outflows", Hayward, C. C., & Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 1682

191. "Giant clumps in the FIRE simulations: a case study of a massive high-redshift galaxy", Oklopčić, A., Hopkins, P. F., Feldmann, R., Kereš, D., Faucher-Giguère, C.-A., & Murray, N. 2017, *Monthly Notices of the Royal Astronomical Society*, 465, 952

190. "ALMA Resolves the Nuclear Disks of Arp 220", Scoville, N., Murchikova, L., Walter, F., et al. 2017, *The Astrophysical Journal*, 836, 66

189. "When the Jeans Do Not Fit: How Stellar Feedback Drives Stellar Kinematics and Complicates Dynamical Modeling in Low-mass Galaxies", El-Badry, K., Wetzel, A. R., Geha, M., Quataert, E., Hopkins, P. F., Kereš, D., Chan, T. K., & Faucher-Giguère, C.-A. 2017, *The Astrophysical Journal*, 835, 193

188. "Are the Formation and Abundances of Metal-poor Stars the Result of Dust Dynamics?", Hopkins, P. F., & Conroy, C. 2017, *The Astrophysical Journal*, 835, 154

187. "Simulating Star Formation Across Cosmic Scales", Hopkins, P. 2017, *NASA ATP Proposal*, 17-ATP17-214

186. "Gravitational torque-driven black hole growth and feedback in cosmological simulations", Anglés-Alcázar, D., Davé, R., Faucher-Giguère, C.-A., Özel, F., & Hopkins, P. F. 2017, *Monthly Notices of the Royal Astronomical Society*, 464, 2840

185. "Constraining the Merging History of Massive Galaxies Since Redshift 3 Using Close Pairs. I. Major Pairs from Candels and the SDSS", Mantha, K. B., McIntosh, D. H., Brennan, R., et al. 2017, *American Astronomical Society Meeting Abstracts #229*, 229, 347.15

184. "Star Clusters within FIRE", Perez, A., Moreno, J., Naiman, J., Ramirez-Ruiz, E., & Hopkins, P. F. 2017, *American Astronomical Society Meeting Abstracts #229*, 229, 343.23

183. "Feedback: Now with Physics", Hopkins, P. F., Quataert, E., Faucher-Giguere, C.-A., Keres, D., Wetzel, A. R., & Murray, N. W. 2017, *American Astronomical Society Meeting Abstracts #229*, 229, 331.01

182. "Better Galactic mass models through chemistry", Sanderson, R. E., Wetzel, A., Hopkins, P. F., & Sharma, S. 2017, *American Astronomical Society Meeting Abstracts #229*, 229, 142.16

181. "The impact of stellar feedback on hot gas in galaxy haloes: the Sunyaev-Zel'dovich effect and soft X-ray emission", van de Voort, F., Quataert, E., Hopkins, P. F., Faucher-Giguère, C.-A., Feldmann, R., Kereš, D., Chan, T. K., & Hafen, Z. 2016, *Monthly Notices of the Royal Astronomical Society*, 463, 4533

180. "The AGORA High-resolution Galaxy Simulations Comparison Project. II. Isolated Disk Test", Kim, J.-. hoon ., Agertz, O., Teyssier, R., et al. 2016, *The Astrophysical Journal*, 833, 202

179. "When and where did GW150914 form?", Lamberts, A., Garrison-Kimmel, S., Clausen, D. R., & Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 463, L31

178. "Strongly time-variable ultraviolet metal-line emission from the circum-galactic medium of high-redshift galaxies", Sravan, N., Faucher-Giguère, C.-A., van de Voort, F., et al. 2016, *Monthly Notices of the Royal Astronomical Society*, 463, 120

177. "MUFASA: galaxy formation simulations with meshless hydrodynamics", Davé, R., Thompson, R., & Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 462, 3265

176. "A constrained-gradient method to control divergence errors in numerical MHD", Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 462, 576

175. "A stellar feedback origin for neutral hydrogen in high-redshift quasar-mass haloes", Faucher-Giguère, C.-A., Feldmann, R., Quataert, E., Kereš, D., Hopkins, P. F., & Murray, N. 2016, *Monthly Notices of the Royal Astronomical Society*, 461, L32

174. "AGN: What's in a Name?", Hopkins, P. F. 2016, *Active Galactic Nuclei: What's in a Name?*, 83

173. "Reconciling Dwarf Galaxies with ΛCDM Cosmology: Simulating a Realistic Population of Satellites around a Milky Way-mass Galaxy", Wetzel, A. R., Hopkins, P. F., Kim, J.-. hoon ., Faucher-Giguère, C.-A., Kereš, D., & Quataert, E. 2016, *The Astrophysical Journal*, 827, L23

172. "Binary stars can provide the 'missing photons' needed for reionization", Ma, X., Hopkins, P. F., Kasen, D., Quataert, E., Faucher-Giguère, C.-A., Kereš, D., Murray, N., & Strom, A. 2016, *Monthly Notices of the Royal Astronomical Society*, 459, 3614

171. "Star formation in a turbulent framework: from giant molecular clouds to protostars", Guszejnov, D., & Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 459, 9

170. "Failures no More: The Radical Consequences of Realistic Stellar Feedback for Dwarf Galaxies, the Milky Way, and Reionization", Hopkins, P. F. 2016, *American Astronomical Society Meeting Abstracts #228*, 228, 304.05

169. "What can Simple Models tell us about Star Formation?", Guszejnov, D., Hopkins, P. F., & Krumholz, M. R. 2016, *American Astronomical Society Meeting Abstracts #228*, 228, 304.04

168. "The Impact of Baryonic Physics on the Structure of Dark Matter Halos: the View from the FIRE Cosmological Simulations", Keung Chan, T., Keres, D., Oñorbe, J., Hopkins, P. F., Muratov, A., Faucher-Giguere, C.-A., & Quataert, E. 2016, *American Astronomical Society Meeting Abstracts #228*, 228, 215.10

167. "Metallicity Distribution Functions of Dwarf Galaxies: A Probe of Star Formation History and Baryonic Physics", Escala, I., Kirby, E. N., Wetzel, A. R., & Hopkins, P. F. 2016, *American Astronomical Society Meeting Abstracts #228*, 228, 209.01

166. "The formation of massive, quiescent galaxies at cosmic noon", Feldmann, R., Hopkins, P. F., Quataert, E., Faucher-Giguère, C.-A., & Kereš, D. 2016, *Monthly Notices of the Royal Astronomical Society*, 458, L14

165. "Stellar and quasar feedback in concert: effects on AGN accretion, obscuration, and outflows", Hopkins, P. F., Torrey, P., Faucher-Giguère, C.-A., Quataert, E., & Murray, N. 2016, *Monthly Notices of the Royal Astronomical Society*, 458, 816

164. "The necessity of feedback physics in setting the peak of the initial mass function", Guszejnov, D., Krumholz, M. R., & Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 458, 673

163. "Breathing FIRE: How Stellar Feedback Drives Radial Migration, Rapid Size Fluctuations, and Population Gradients in Low-mass Galaxies", El-Badry, K., Wetzel, A., Geha, M., Hopkins, P. F., Kereš, D., Chan, T. K., & Faucher-Giguère, C.-A. 2016, *The Astrophysical Journal*, 820, 131

162. "The fundamentally different dynamics of dust and gas in molecular clouds", Hopkins, P. F., & Lee, H. 2016, *Monthly Notices of the Royal Astronomical Society*, 456, 4174

161. "Jumping the gap: the formation conditions and mass function of 'pebble-pile' planetesimals", Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 456, 2383

160. "Evolution of Intrinsic Scatter in the SFR-Stellar Mass Correlation at $0.5 < z < 3$", Kurczynski, P., Gawiser, E., Acquaviva, V., et al. 2016, *The Astrophysical Journal*, 820, L1

159. "Small Seed Black Hole Growth in Various Accretion Regimes", Gerling-Dunsmore, H. J., & Hopkins, P. F. 2016, *APS April Meeting Abstracts*, 2016, M18.002

158. "The origin and evolution of the galaxy mass-metallicity relation", Ma, X., Hopkins, P. F., Faucher-Giguère, C.-A., Zolman, N., Muratov, A. L., Kereš, D., & Quataert, E. 2016, *Monthly Notices of the Royal Astronomical Society*, 456, 2140

157. "A simple phenomenological model for grain clustering in turbulence", Hopkins, P. F. 2016, *Monthly Notices of the Royal Astronomical Society*, 455, 89

156. "Accurate, meshless methods for magnetohydrodynamics", Hopkins, P. F., & Raives, M. J. 2016, *Monthly Notices of the Royal Astronomical Society*, 455, 51

155. "Radiation Hydrodynamics with GIZMO: The Disruption of Giant Molecular Clouds by Stellar Radiation Pressure", Khatami, D., & Hopkins, P. F. 2016, *American Astronomical Society Meeting Abstracts #227*, 227, 347.06

154. "The impact of baryonic physics on the structure of dark matter haloes: the view from the FIRE cosmological simulations", Chan, T. K., Kereš, D., Oñorbe, J., Hopkins, P. F., Muratov, A. L., Faucher-Giguère, C.-A., & Quataert, E. 2015, *Monthly Notices of the Royal Astronomical Society*, 454, 2981

153. "Gusty, gaseous flows of FIRE: galactic winds in cosmological simulations with explicit stellar feedback", Muratov, A. L., Kereš, D., Faucher-Giguère, C.-A., Hopkins, P. F., Quataert, E., & Murray, N. 2015, *Monthly Notices of the Royal Astronomical Society*, 454, 2691

152. "Forged in FIRE: cusps, cores and baryons in low-mass dwarf galaxies", Oñorbe, J., Boylan-Kolchin, M., Bullock, J. S., Hopkins, P. F., Kereš, D., Faucher-Giguère, C.-A., Quataert, E., & Murray, N. 2015, *Monthly Notices of the Royal Astronomical Society*, 454, 2092

151. "Sweating the small stuff: simulating dwarf galaxies, ultra-faint dwarf galaxies, and their own tiny satellites", Wheeler, C., Oñorbe, J., Bullock, J. S., Boylan-Kolchin, M., Elbert, O. D., Garrison-Kimmel, S., Hopkins, P. F., & Kereš, D. 2015, *Monthly Notices of the Royal Astronomical Society*, 453, 1305

150. "The difficulty of getting high escape fractions of ionizing photons from high-redshift galaxies: a view from the FIRE cosmological simulations", Ma, X., Kasen, D., Hopkins, P. F., Faucher-Giguère, C.-A., Quataert, E., Kereš, D., & Murray, N. 2015, *Monthly Notices of the Royal Astronomical Society*, 453, 960

149. "The formation of submillimetre-bright galaxies from gas infall over a billion years", Narayanan, D., Turk, M., Feldmann, R., et al. 2015, *Nature*, 525, 496

148. "The creation and persistence of a misaligned gas disc in a simulated early-type galaxy", van de Voort, F., Davis, T. A., Kereš, D., Quataert, E., Faucher-Giguère, C.-A., & Hopkins, P. F. 2015, *Monthly Notices of the Royal Astronomical Society*, 451, 3269

147. "Mapping the core mass function to the initial mass function", Guszejnov, D., & Hopkins, P. F. 2015, *Monthly Notices of the Royal Astronomical Society*, 450, 4137

146. "A new class of accurate, mesh-free hydrodynamic simulation methods", Hopkins, P. F. 2015, *Monthly Notices of the Royal Astronomical Society*, 450, 53

145. "Neutral hydrogen in galaxy haloes at the peak of the cosmic star formation history", Faucher-Giguère, C.-A., Hopkins, P. F., Kereš, D., Muratov, A. L., Quataert, E., & Murray, N. 2015, *Monthly Notices of the Royal Astronomical Society*, 449, 987

144. "Galactic r-process enrichment by neutron star mergers in cosmological simulations of a Milky Way-mass galaxy", van de Voort, F., Quataert, E., Hopkins, P. F., Kereš, D., & Faucher-Giguère, C.-A. 2015, *Monthly Notices of the Royal Astronomical Society*, 447, 140

143. "Multiplicity of High-z Submillimeter Galaxies from Cosmological Simulations", Ball, D., Narayanan, D., Hopkins, P. F., & Turk, M. 2015, *American Astronomical Society Meeting Abstracts #225*, 225, 251.14

142. "Dynamical Scaling Relations and the Angular Momentum Problem in the FIRE Simulations", Schmitz, D., Hopkins, P. F., Quataert, E., Keres, D., & Faucher-Giguere, C.-A. 2015, *American Astronomical Society Meeting Abstracts #225*, 225, 231.01

141. "Morphologically Disturbed Massive Galaxies: Nature and Evolution During $0.6 < z < 2.5$ in the CANDELS UDS and GOODS-S Fields", Cook, J. S., McIntosh, D. H., Rizer, Z., et al. 2015, *American Astronomical Society Meeting Abstracts #225*, 225, 143.54

140. "Clumpy Galaxies at High Redshifts: Insights from the FIRE Simulations", Oklopcic, A., Hopkins, P. F., Keres, D., Faucher-Giguere, C.-A., & Quataert, E. 2015, *American Astronomical Society Meeting Abstracts #225*, 225, 143.43

139. "Astrophysics: Stars fight back", Hopkins, P. F. 2014, *Nature*, 516, 44

138. "Some Stars are Totally Metal: A New Mechanism Driving Dust across Star-forming Clouds, and Consequences for Planets, Stars, and Galaxies", Hopkins, P. F. 2014, *The Astrophysical Journal*, 797, 59

137. "Do we expect most AGN to live in discs?", Hopkins, P. F., Kocevski, D. D., & Bundy, K. 2014, *Monthly Notices of the Royal Astronomical Society*, 445, 823

136. "Galaxies on FIRE (Feedback In Realistic Environments): stellar feedback explains cosmologically inefficient star formation", Hopkins, P. F., Kereš, D., Oñorbe, J., Faucher-Giguère, C.-A., Quataert, E., Murray, N., & Bullock, J. S. 2014, *Monthly Notices of the Royal Astronomical Society*, 445, 581

135. "GIZMO: Multi-method magneto-hydrodynamics+gravity code", Hopkins, P. F. 2014, *Astrophysics Source Code Library*, ascl:1410.003

134. "No More Active Galactic Nuclei in Clumpy Disks Than in Smooth Galaxies at z ~2 in CANDELS/3D-HST", Trump, J. R., Barro, G., Juneau, S., et al. 2014, *The Astrophysical Journal*, 793, 101

133. "Galaxies on FIRE: Stellar Feedback Explains Inefficient Star Formation", Hopkins, P. F. 2014, *American Astronomical Society Meeting Abstracts #224*, 224, 215.06

132. "Morphologies of z $\sim$ 0.7 AGN host galaxies in CANDELS: no trend of merger incidence with AGN luminosity", Villforth, C., Hamann, F., Rosario, D. J., et al. 2014, *Monthly Notices of the Royal Astronomical Society*, 439, 3342

131. "The Origin and Universality of the Stellar Initial Mass Function", Offner, S. S. R., Clark, P. C., Hennebelle, P., Bastian, N., Bate, M. R., Hopkins, P. F., Moraux, E., & Whitworth, A. P. 2014, *Protostars and Planets VI*, 53

130. "The AGORA High-resolution Galaxy Simulations Comparison Project", Kim, J.-. hoon ., Abel, T., Agertz, O., et al. 2014, *The Astrophysical Journal Supplement Series*, 210, 14

129. "Turbulent Disks are Never Stable: Fragmentation and Turbulence-promoted Planet Formation", Hopkins, P. F., & Christiansen, J. L. 2013, *The Astrophysical Journal*, 776, 48

128. "Feedback-regulated star formation in molecular clouds and galactic discs", Faucher-Giguère, C.-A., Quataert, E., & Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 433, 1970

127. "Why is the Milky Way X-factor constant?", Narayanan, D., & Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 433, 1223

126. "Variations in the stellar CMF and IMF: from bottom to top", Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 433, 170

125. "Resolving the generation of starburst winds in Galaxy mergers", Hopkins, P. F., Kereš, D., Murray, N., Hernquist, L., Narayanan, D., & Hayward, C. C. 2013, *Monthly Notices of the Royal Astronomical Society*, 433, 78

124. "Dense molecular gas: a sensitive probe of stellar feedback models", Hopkins, P. F., Narayanan, D., Murray, N., & Quataert, E. 2013, *Monthly Notices of the Royal Astronomical Society*, 433, 69

123. "The meaning and consequences of star formation criteria in galaxy models with resolved stellar feedback", Hopkins, P. F., Narayanan, D., & Murray, N. 2013, *Monthly Notices of the Royal Astronomical Society*, 432, 2647

122. "Accretion does not drive the turbulence in galactic discs", Hopkins, P. F., Kereš, D., & Murray, N. 2013, *Monthly Notices of the Royal Astronomical Society*, 432, 2639

121. "Pressure-Entropy SPH: Pressure-entropy smooth-particle hydrodynamics", Hopkins, P. F. 2013, *Astrophysics Source Code Library*, ascl:1305.006

120. "Modeling Mid-infrared Diagnostics of Obscured Quasars and Starbursts", Snyder, G. F., Hayward, C. C., Sajina, A., Jonsson, P., Cox, T. J., Hernquist, L., Hopkins, P. F., & Yan, L. 2013, *The Astrophysical Journal*, 768, 168

119. "Star formation in galaxy mergers with realistic models of stellar feedback and the interstellar medium", Hopkins, P. F., Cox, T. J., Hernquist, L., Narayanan, D., Hayward, C. C., & Murray, N. 2013, *Monthly Notices of the Royal Astronomical Society*, 430, 1901

118. "A model for (non-lognormal) density distributions in isothermal turbulence", Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 430, 1880

117. "A general theory of turbulent fragmentation", Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 430, 1653

116. "CANDELS: The Progenitors of Compact Quiescent Galaxies at z ~2", Barro, G., Faber, S. M., Pérez-González, P. G., et al. 2013, *The Astrophysical Journal*, 765, 104

115. "A general class of Lagrangian smoothed particle hydrodynamics methods and implications for fluid mixing problems", Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 428, 2840

114. "Connecting AGN Feedback, the Star-Forming Interstellar Medium, and Galaxy Formation", Hopkins, P. 2013, *NASA ATP Proposal*, 13-ATP13-15

113. "Submillimetre galaxies in a hierarchical universe: number counts, redshift distribution and implications for the IMF", Hayward, C. C., Narayanan, D., Kereš, D., Jonsson, P., Hopkins, P. F., Cox, T. J., & Hernquist, L. 2013, *Monthly Notices of the Royal Astronomical Society*, 428, 2529

112. "Why do stars form in clusters? An analytic model for stellar correlation functions", Hopkins, P. F. 2013, *Monthly Notices of the Royal Astronomical Society*, 428, 1950

111. "Stellar feedback and bulge formation in clumpy discs", Hopkins, P. F., Kereš, D., Murray, N., Quataert, E., & Hernquist, L. 2012, *Monthly Notices of the Royal Astronomical Society*, 427, 968

110. "Three-dimensional Radiative Transfer Calculations of Radiation Feedback from Massive Black Holes: Outflow of Mass from the Dusty "Torus"", Roth, N., Kasen, D., Hopkins, P. F., & Quataert, E. 2012, *The Astrophysical Journal*, 759, 36

109. "SpIES: The Spitzer-IRAC Equatorial Survey", Richards, G., Lacy, M., Strauss, M., et al. 2012, *Spitzer Proposal*, 90045

108. "Why are active galactic nuclei and host galaxies misaligned?", Hopkins, P. F., Hernquist, L., Hayward, C. C., & Narayanan, D. 2012, *Monthly Notices of the Royal Astronomical Society*, 425, 1121

107. "Dust-Driven Winds from the 'Torus' Simulated Using Monte Carlo Radiative Transfer", Roth, N., Kasen, D., Hopkins, P. F., & Quataert, E. 2012, *AGN Winds in Charleston*, 460, 204

106. "The stellar initial mass function, core mass function and the last-crossing distribution", Hopkins, P. F. 2012, *Monthly Notices of the Royal Astronomical Society*, 423, 2037

105. "An excursion-set model for the structure of giant molecular clouds and the interstellar medium", Hopkins, P. F. 2012, *Monthly Notices of the Royal Astronomical Society*, 423, 2016

104. "Galaxy Disks Do Not Need to Survive in the ΛCDM Paradigm: The Galaxy Merger Rate Out to z ~1.5 from Morpho-kinematic Data", Puech, M., Hammer, F., Hopkins, P. F., Athanassoula, E., Flores, H., Rodrigues, M., Wang, J. L., & Yang, Y. B. 2012, *The Astrophysical Journal*, 753, 128

103. "Stellar feedback in galaxies and the origin of galaxy-scale winds", Hopkins, P. F., Quataert, E., & Murray, N. 2012, *Monthly Notices of the Royal Astronomical Society*, 421, 3522

102. "The structure of the interstellar medium of star-forming galaxies", Hopkins, P. F., Quataert, E., & Murray, N. 2012, *Monthly Notices of the Royal Astronomical Society*, 421, 3488

101. "Dynamical delays between starburst and AGN activity in galaxy nuclei", Hopkins, P. F. 2012, *Monthly Notices of the Royal Astronomical Society*, 420, L8

100. "The origins of active galactic nuclei obscuration: the 'torus' as a dynamical, unstable driver of accretion", Hopkins, P. F., Hayward, C. C., Narayanan, D., & Hernquist, L. 2012, *Monthly Notices of the Royal Astronomical Society*, 420, 320

99. "Dust-Driven Winds from Accreting Super-Massive Black Holes Simulated Using Monte Carlo Radiative Transfer", Roth, N., Kasen, D., Hopkins, P. F., & Quataert, E. 2012, *American Astronomical Society Meeting Abstracts #219*, 219, 243.01

98. "CANDELS: The Cosmic Assembly Near-infrared Deep Extragalactic Legacy Survey—The Hubble Space Telescope Observations, Imaging Data Products, and Mosaics", Koekemoer, A. M., Faber, S. M., Ferguson, H. C., et al. 2011, *The Astrophysical Journal Supplement Series*, 197, 36

97. "CANDELS: The Cosmic Assembly Near-infrared Deep Extragalactic Legacy Survey", Grogin, N. A., Kocevski, D. D., Faber, S. M., et al. 2011, *The Astrophysical Journal Supplement Series*, 197, 35

96. "A Multiwavelength Study of Binary Quasars and Their Environments", Green, P. J., Myers, A. D., Barkhouse, W. A., Aldcroft, T. L., Trichas, M., Richards, G. T., Ruiz, Á., & Hopkins, P. F. 2011, *The Astrophysical Journal*, 743, 81

95. "Self-regulated star formation in galaxies via momentum input from massive stars", Hopkins, P. F., Quataert, E., & Murray, N. 2011, *Monthly Notices of the Royal Astronomical Society*, 417, 950

94. "An analytic model of angular momentum transport by gravitational torques: from galaxies to massive black holes", Hopkins, P. F., & Quataert, E. 2011, *Monthly Notices of the Royal Astronomical Society*, 415, 1027

93. "Do Sub-Millimeter Galaxy Number Counts Provide Evidence for a Top-Heavy IMF?", Hayward, C. C., Narayanan, D., Jonsson, P., Cox, T. J., Kereš, D., Hopkins, P. F., & Hernquist, L. 2011, *UP2010: Have Observations Revealed a Variable Upper End of the Initial Mass Function?*, 440, 369

92. "An explanation for the slopes of stellar cusps in galaxy spheroids", Hopkins, P. F., & Quataert, E. 2011, *Monthly Notices of the Royal Astronomical Society*, 411, L61

91. "A physical model for the origin of the diffuse cosmic infrared background and the opacity of the Universe to very high energy γ-rays", Younger, J. D., & Hopkins, P. F. 2011, *Monthly Notices of the Royal Astronomical Society*, 410, 2180

90. "Relation Between Globular Clusters and Supermassive Black Holes in Ellipticals as a Manifestation of the Black Hole Fundamental Plane", Snyder, G. F., Hopkins, P. F., & Hernquist, L. 2011, *The Astrophysical Journal*, 728, L24

89. "Mergers in ΛCDM: Uncertainties in Theoretical Predictions and Interpretations of the Merger Rate", Hopkins, P. F., Croton, D., Bundy, K., et al. 2010, *The Astrophysical Journal*, 724, 915

88. "On Sizes, Kinematics, M/L Gradients, and Light Profiles of Massive Compact Galaxies at z ~2", Wuyts, S., Cox, T. J., Hayward, C. C., Franx, M., Hernquist, L., Hopkins, P. F., Jonsson, P., & van Dokkum, P. G. 2010, *The Astrophysical Journal*, 722, 1666

87. "Origins, Structure, and Inflows of m=1 Modes in Quasi-Keplerian Disks", Hopkins, P. F. 2010, *arXiv e-prints*, arXiv:1009.4702

86. "A physical model for z ~2 dust-obscured galaxies", Narayanan, D., Dey, A., Hayward, C. C., et al. 2010, *Monthly Notices of the Royal Astronomical Society*, 407, 1701

85. "How do massive black holes get their gas?", Hopkins, P. F., & Quataert, E. 2010, *Monthly Notices of the Royal Astronomical Society*, 407, 1529

84. "A non-parametric estimate of mass 'scoured' in galaxy cores", Hopkins, P. F., & Hernquist, L. 2010, *Monthly Notices of the Royal Astronomical Society*, 407, 447

83. "The Rise and Fall of Passive Disk Galaxies: Morphological Evolution Along the Red Sequence Revealed by COSMOS", Bundy, K., Scarlata, C., Carollo, C. M., et al. 2010, *The Astrophysical Journal*, 719, 1969

82. "Constraints on Black Hole Growth, Quasar Lifetimes, and Eddington Ratio Distributions from the SDSS Broad-line Quasar Black Hole Mass Function", Kelly, B. C., Vestergaard, M., Fan, X., Hopkins, P., Hernquist, L., & Siemiginowska, A. 2010, *The Astrophysical Journal*, 719, 1315

81. "Self-regulated black hole growth via momentum deposition in galaxy merger simulations", Debuhr, J., Quataert, E., Ma, C.-P., & Hopkins, P. 2010, *Monthly Notices of the Royal Astronomical Society*, 406, L55

80. "The nuclear stellar disc in Andromeda: a fossil from the era of black hole growth", Hopkins, P. F., & Quataert, E. 2010, *Monthly Notices of the Royal Astronomical Society*, 405, L41

79. "Quasars, Feedback, and Galaxy Formation", Hopkins, P. F. 2010, *Co-Evolution of Central Black Holes and Galaxies*, 267, 421

78. "The Distribution and Evolution of Black Hole Mass in Broad Line Quasars", Kelly, B. C., Vestergaard, M., Fan, X., Hernquist, L., Hopkins, P., & Siemiginowska, A. 2010, *Co-Evolution of Central Black Holes and Galaxies*, 267, 263

77. "Mergers and Bulge Formation in ΛCDM: Which Mergers Matter?", Hopkins, P. F., Bundy, K., Croton, D., et al. 2010, *The Astrophysical Journal*, 715, 202

76. "Mergers, active galactic nuclei and 'normal' galaxies: contributions to the distribution of star formation rates and infrared luminosity functions", Hopkins, P. F., Younger, J. D., Hayward, C. C., Narayanan, D., & Hernquist, L. 2010, *Monthly Notices of the Royal Astronomical Society*, 402, 1693

75. "A new empirical method to infer the starburst history of the Universe from local galaxy properties", Hopkins, P. F., & Hernquist, L. 2010, *Monthly Notices of the Royal Astronomical Society*, 402, 985

74. "A maximum stellar surface density in dense stellar systems", Hopkins, P. F., Murray, N., Quataert, E., & Thompson, T. A. 2010, *Monthly Notices of the Royal Astronomical Society*, 401, L19

73. "When should we treat galaxies as isolated?", Hopkins, P. F., Kereš, D., Ma, C.-P., & Quataert, E. 2010, *Monthly Notices of the Royal Astronomical Society*, 401, 1131

72. "Discriminating between the physical processes that drive spheroid size evolution", Hopkins, P. F., Bundy, K., Hernquist, L., Wuyts, S., & Cox, T. J. 2010, *Monthly Notices of the Royal Astronomical Society*, 401, 1099

71. "Quasar feedback: more bang for your buck", Hopkins, P. F., & Elvis, M. 2010, *Monthly Notices of the Royal Astronomical Society*, 401, 7

70. "Metallicity gradients at large galactocentric radii using the near-infrared Calcium triplet", Foster, C., Proctor, R. N., Forbes, D. A., Spolaor, M., Hopkins, P. F., & Brodie, J. P. 2009, *Monthly Notices of the Royal Astronomical Society*, 400, 2135

69. "How Do Disks Survive Mergers?", Hopkins, P. F. 2009, *Galaxy Evolution: Emerging Insights and Future Challenges*, 419, 228

68. "Compact high-redshift galaxies are the cores of the most massive present-day spheroids", Hopkins, P. F., Bundy, K., Murray, N., Quataert, E., Lauer, T. R., & Ma, C.-P. 2009, *Monthly Notices of the Royal Astronomical Society*, 398, 898

67. "Are most low-luminosity active galactic nuclei really obscured?", Hopkins, P. F., Hickox, R., Quataert, E., & Hernquist, L. 2009, *Monthly Notices of the Royal Astronomical Society*, 398, 333

66. "The small scatter in BH-host correlations and the case for self-regulated BH growth", Hopkins, P. F., Murray, N., & Thompson, T. A. 2009, *Monthly Notices of the Royal Astronomical Society*, 398, 303

65. "The effects of gas on morphological transformation in mergers: implications for bulge and disc demographics", Hopkins, P. F., Somerville, R. S., Cox, T. J., et al. 2009, *Monthly Notices of the Royal Astronomical Society*, 397, 802

64. "Color Distributions, Number, and Mass Densities of Massive Galaxies at $1.5 < z < 3$: Comparing Observations with Merger Simulations", Wuyts, S., Franx, M., Cox, T. J., et al. 2009, *The Astrophysical Journal*, 700, 799

63. "Quasars Are Not Light Bulbs: Testing Models of Quasar Lifetimes with the Observed Eddington Ratio Distribution", Hopkins, P. F., & Hernquist, L. 2009, *The Astrophysical Journal*, 698, 1550

62. "Recovering Stellar Population Properties and Redshifts from Broadband Photometry of Simulated Galaxies: Lessons for SED Modeling", Wuyts, S., Franx, M., Cox, T. J., Hernquist, L., Hopkins, P. F., Robertson, B. E., & van Dokkum, P. G. 2009, *The Astrophysical Journal*, 696, 348

61. "Galaxy Collisions: A Factory for Ellipticals, Quasars, Feedback, and Disks?", Hopkins, P. F. 2009, *American Astronomical Society Meeting Abstracts #214*, 214, 111.01

60. "Dissipation and Extra Light in Galactic Nuclei. III. "Core" Ellipticals and "Missing" Light", Hopkins, P. F., Lauer, T. R., Cox, T. J., Hernquist, L., & Kormendy, J. 2009, *The Astrophysical Journal Supplement Series*, 181, 486

59. "He II Reionization and its Effect on the Intergalactic Medium", McQuinn, M., Lidz, A., Zaldarriaga, M., Hernquist, L., Hopkins, P. F., Dutta, S., & Faucher-Giguère, C.-A. 2009, *The Astrophysical Journal*, 694, 842

58. "Dissipation and Extra Light in Galactic Nuclei. II. "Cusp" Ellipticals", Hopkins, P. F., Cox, T. J., Dutta, S. N., Hernquist, L., Kormendy, J., & Lauer, T. R. 2009, *The Astrophysical Journal Supplement Series*, 181, 135

57. "A Characteristic Division Between the Fueling of Quasars and Seyferts: Five Simple Tests", Hopkins, P. F., & Hernquist, L. 2009, *The Astrophysical Journal*, 694, 599

56. "When Is Secular Evolution Important?", Hopkins, P. F., Keres, D., Ma, C.-P., & Quataert, E. 2009, *arXiv e-prints*, arXiv:0902.2218

55. "Dissipation and Extra Light in Galactic Nuclei. IV. Evolution in the Scaling Relations of Spheroids", Hopkins, P. F., Hernquist, L., Cox, T. J., Keres, D., & Wuyts, S. 2009, *The Astrophysical Journal*, 691, 1424

54. "How do Disks Survive Mergers?", Hopkins, P. F., Cox, T. J., Younger, J. D., & Hernquist, L. 2009, *The Astrophysical Journal*, 691, 1168

53. "Lifting the Veil on the Black Hole-Galaxy Connection: Opportunities for 2010-2020", Coppi, P., Bassani, L., Della Ceca, R., et al. 2009, *astro2010: The Astronomy and Astrophysics Decadal Survey*, 2010, 55

52. "Lifting the Cosmic Veil on the Co-evolution of Black Holes and Galaxies: The Role of Far-Infrared Spectroscopy from Space", Appelton, P. N., Blain, A. W., Bradford, C. M., et al. 2009, *astro2010: The Astronomy and Astrophysics Decadal Survey*, 2010, 3

51. "A semi-analytic model for the co-evolution of galaxies, black holes and active galactic nuclei", Somerville, R. S., Hopkins, P. F., Cox, T. J., Robertson, B. E., & Hernquist, L. 2008, *Monthly Notices of the Royal Astronomical Society*, 391, 481

50. "Dissipation and the Fundamental Plane: Observational Tests", Hopkins, P. F., Cox, T. J., & Hernquist, L. 2008, *The Astrophysical Journal*, 689, 17

49. "The Radical Consequences of Realistic Satellite Orbits for the Heating and Implied Merger Histories of Galactic Disks", Hopkins, P. F., Hernquist, L., Cox, T. J., Younger, J. D., & Besla, G. 2008, *The Astrophysical Journal*, 688, 757

48. "Constraining the quasar population with the broad-line width distribution", Fine, S., Croom, S. M., Hopkins, P. F., et al. 2008, *Monthly Notices of the Royal Astronomical Society*, 390, 1413

47. "The Self-Regulated Growth of Supermassive Black Holes", Younger, J. D., Hopkins, P. F., Cox, T. J., & Hernquist, L. 2008, *The Astrophysical Journal*, 686, 815

46. "Quenching Models: Their Interplay and Degeneracies", Hopkins, P. F. 2008, *Panoramic Views of Galaxy Formation and Evolution*, 399, 405

45. "Galaxy Mergers: Driving Galaxy Formation", Cox, T. J., Dutta, S. N., Hopkins, P. F., & Hernquist, L. 2008, *Panoramic Views of Galaxy Formation and Evolution*, 399, 284

44. "A black hole fundamental plane", Hopkins, P. F. 2008, *Formation and Evolution of Galaxy Bulges*, 245, 219

43. "Forming bulges during galaxy minor mergers", Cox, T. J., Younger, J., Hernquist, L., & Hopkins, P. F. 2008, *Formation and Evolution of Galaxy Bulges*, 245, 63

42. "The Role of Galactic Winds on Molecular Gas Emission from Galaxy Mergers", Narayanan, D., Cox, T. J., Kelly, B., et al. 2008, *The Astrophysical Journal Supplement Series*, 176, 331

41. "Dissipation and Extra Light in Galactic Nuclei. I. Gas-Rich Merger Remnants", Hopkins, P. F., Hernquist, L., Cox, T. J., Dutta, S. N., & Rothberg, B. 2008, *The Astrophysical Journal*, 679, 156

40. "Modeling the Dust Properties of z ~6 Quasars with ART^2—All-Wavelength Radiative Transfer with Adaptive Refinement Tree", Li, Y., Hopkins, P. F., Hernquist, L., et al. 2008, *The Astrophysical Journal*, 678, 41

39. "A Cosmological Framework for the Co-Evolution of Quasars, Supermassive Black Holes, and Elliptical Galaxies. II. Formation of Red Ellipticals", Hopkins, P. F., Cox, T. J., Kereš, D., & Hernquist, L. 2008, *The Astrophysical Journal Supplement Series*, 175, 390

38. "A Cosmological Framework for the Co-Evolution of Quasars, Supermassive Black Holes, and Elliptical Galaxies. I. Galaxy Mergers and Quasar Activity", Hopkins, P. F., Hernquist, L., Cox, T. J., & Kereš, D. 2008, *The Astrophysical Journal Supplement Series*, 175, 356

37. "A physical model for the fueling and evolution of quasars in galaxy mergers", Hopkins, P. F. 2008, *Ph.D. Thesis*,

36. "The Nature of CO Emission from z ~6 Quasars", Narayanan, D., Li, Y., Cox, T. J., et al. 2008, *The Astrophysical Journal Supplement Series*, 174, 13

35. "Rest-Frame Ultraviolet to Near-Infrared Observations of an Interacting Lyman Break Galaxy at z=4.42", Younger, J. D., Huang, J.-S., Fazio, G. G., et al. 2007, *The Astrophysical Journal*, 671, 1241

34. "An Observed Fundamental Plane Relation for Supermassive Black Holes", Hopkins, P. F., Hernquist, L., Cox, T. J., Robertson, B., & Krause, E. 2007, *The Astrophysical Journal*, 669, 67

33. "A Theoretical Interpretation of the Black Hole Fundamental Plane", Hopkins, P. F., Hernquist, L., Cox, T. J., Robertson, B., & Krause, E. 2007, *The Astrophysical Journal*, 669, 45

32. "Photometric Properties of the Most Massive High-Redshift Galaxies", Robertson, B., Li, Y., Cox, T. J., Hernquist, L., & Hopkins, P. F. 2007, *The Astrophysical Journal*, 667, 60

31. "Merger-Driven Star Formation History of the Universe", Hopkins, P. 2007, *Star Formation, Then and Now*, 43

30. "Formation of z~6 Quasars from Hierarchical Galaxy Mergers", Li, Y., Hernquist, L., Robertson, B., et al. 2007, *The Astrophysical Journal*, 665, 187

29. "The Co-Formation of Spheroids and Quasars Traced in their Clustering", Hopkins, P. F., Lidz, A., Hernquist, L., Coil, A. L., Myers, A. D., Cox, T. J., & Spergel, D. N. 2007, *The Astrophysical Journal*, 662, 110

28. "Is the dependence of spectral index on luminosity real in optically selected AGN samples?", Tang, S. M., Zhang, S. N., & Hopkins, P. F. 2007, *Monthly Notices of the Royal Astronomical Society*, 377, 1113

27. "Quasars, Mergers, and the Formation of Red Galaxies", Hopkins, P. F. 2007, *American Astronomical Society Meeting Abstracts #209*, 209, 251.03

26. "Observational Evidence for the Coevolution of Galaxy Mergers, Quasars, and the Blue/Red Galaxy Transition", Hopkins, P. F., Bundy, K., Hernquist, L., & Ellis, R. S. 2007, *The Astrophysical Journal*, 659, 976

25. "Feedback-driven Evolution of the Far-Infrared Spectral Energy Distributions of Luminous and Ultraluminous Infrared Galaxies", Chakrabarti, S., Cox, T. J., Hernquist, L., Hopkins, P. F., Robertson, B., & Di Matteo, T. 2007, *The Astrophysical Journal*, 658, 840

24. "An Observational Determination of the Bolometric Quasar Luminosity Function", Hopkins, P. F., Richards, G. T., & Hernquist, L. 2007, *The Astrophysical Journal*, 654, 731

23. "The Shape, Multiplicity, and Evolution of Superclusters in ΛCDM Cosmology", Wray, J. J., Bahcall, N. A., Bode, P., Boettiger, C., & Hopkins, P. F. 2006, *The Astrophysical Journal*, 652, 907

22. "The Relation between Quasar and Merging Galaxy Luminosity Functions and the Merger-driven Star Formation History of the Universe", Hopkins, P. F., Somerville, R. S., Hernquist, L., Cox, T. J., Robertson, B., & Li, Y. 2006, *The Astrophysical Journal*, 652, 864

21. "An Upper Limit to the Degree of Evolution between Supermassive Black Holes and Their Host Galaxies", Hopkins, P. F., Robertson, B., Krause, E., Hernquist, L., & Cox, T. J. 2006, *The Astrophysical Journal*, 652, 107

20. "The Kinematic Structure of Merger Remnants", Cox, T. J., Dutta, S. N., Di Matteo, T., Hernquist, L., Hopkins, P. F., Robertson, B., & Springel, V. 2006, *The Astrophysical Journal*, 650, 791

19. "Fueling Low-Level AGN Activity through Stochastic Accretion of Cold Gas", Hopkins, P. F., & Hernquist, L. 2006, *The Astrophysical Journal Supplement Series*, 166, 1

18. "X-Ray Emission from Hot Gas in Galaxy Mergers", Cox, T. J., Di Matteo, T., Hernquist, L., Hopkins, P. F., Robertson, B., & Springel, V. 2006, *The Astrophysical Journal*, 643, 692

17. "How Much Mass Do Supermassive Black Holes Eat in Their Old Age?", Hopkins, P. F., Narayan, R., & Hernquist, L. 2006, *The Astrophysical Journal*, 643, 641

16. "Molecular Outflows in Galaxy Merger Simulations with Embedded Active Galactic Nuclei", Narayanan, D., Cox, T. J., Robertson, B., et al. 2006, *The Astrophysical Journal*, 642, L107

15. "The Evolution of the M_{BH}-σ Relation", Robertson, B., Hernquist, L., Cox, T. J., Di Matteo, T., Hopkins, P. F., Martini, P., & Springel, V. 2006, *The Astrophysical Journal*, 641, 90

14. "The Luminosity Dependence of Quasar Clustering", Lidz, A., Hopkins, P. F., Cox, T. J., Hernquist, L., & Robertson, B. 2006, *The Astrophysical Journal*, 641, 41

13. "The Fundamental Scaling Relations of Elliptical Galaxies", Robertson, B., Cox, T. J., Hernquist, L., Franx, M., Hopkins, P. F., Martini, P., & Springel, V. 2006, *The Astrophysical Journal*, 641, 21

12. "Simulated Molecular Gas Emission in Galaxy Mergers with Embedded AGN", Narayanan, D., Cox, T. J., Robertson, B., et al. 2006, *arXiv e-prints*, astro-ph/0603405

11. "Determining the Properties and Evolution of Red Galaxies from the Quasar Luminosity Function", Hopkins, P. F., Hernquist, L., Cox, T. J., Robertson, B., & Springel, V. 2006, *The Astrophysical Journal Supplement Series*, 163, 50

10. "A Unified, Merger-driven Model of the Origin of Starbursts, Quasars, the Cosmic X-Ray Background, Supermassive Black Holes, and Galaxy Spheroids", Hopkins, P. F., Hernquist, L., Cox, T. J., Di Matteo, T., Robertson, B., & Springel, V. 2006, *The Astrophysical Journal Supplement Series*, 163, 1

9. "The Evolution in the Faint-End Slope of the Quasar Luminosity Function", Hopkins, P. F., Hernquist, L., Cox, T. J., Robertson, B., Di Matteo, T., & Springel, V. 2006, *The Astrophysical Journal*, 639, 700

8. "The Fundamental Scaling Relations of Elliptical Galaxies", Robertson, B. E., Cox, T. J., Hernquist, L., Hopkins, P. F., Martini, P., & Springel, V. 2005, *American Astronomical Society Meeting Abstracts*, 207, 194.02

7. "Unifying the Quasar, Black Hole, Interacting Galaxy, and Spheroid Populations through Galaxy Mergers", Hopkins, P. F., Hernquist, L., Cox, T. J., et al. 2005, *American Astronomical Society Meeting Abstracts*, 207, 116.04

6. "Luminosity-dependent Quasar Lifetimes: Reconciling the Optical and X-Ray Quasar Luminosity Functions", Hopkins, P. F., Hernquist, L., Cox, T. J., Di Matteo, T., Robertson, B., & Springel, V. 2005, *The Astrophysical Journal*, 632, 81

5. "Luminosity-dependent Quasar Lifetimes: A New Interpretation of the Quasar Luminosity Function", Hopkins, P. F., Hernquist, L., Cox, T. J., Di Matteo, T., Robertson, B., & Springel, V. 2005, *The Astrophysical Journal*, 630, 716

4. "Black Holes in Galaxy Mergers: Evolution of Quasars", Hopkins, P. F., Hernquist, L., Cox, T. J., Di Matteo, T., Martini, P., Robertson, B., & Springel, V. 2005, *The Astrophysical Journal*, 630, 705

3. "A Physical Model for the Origin of Quasar Lifetimes", Hopkins, P. F., Hernquist, L., Martini, P., Cox, T. J., Robertson, B., Di Matteo, T., & Springel, V. 2005, *The Astrophysical Journal*, 625, L71

2. "Cluster Alignments and Ellipticities in ΛCDM Cosmology", Hopkins, P. F., Bahcall, N. A., & Bode, P. 2005, *The Astrophysical Journal*, 618, 1

1. "Dust Reddening in Sloan Digital Sky Survey Quasars", Hopkins, P. F., Strauss, M. A., Hall, P. B., et al. 2004, *The Astronomical Journal*, 128, 1112

Invited Talks & Colloquia

225. "Theory Confronting Observations in High-Redshift Galaxies and Quasars", Invited Talk, Conference "Observing the Evolving Universe," Caltech, Pasadena, August 2023

224. "GIZMO Code Capabilities and Simulation Suites", Invited Review Talk and Discussion Lead, FIRE Collaboration Project Leadership Meeting, MIT, August 2023

223. "Paradigm Shifts in Galaxy Formation and Cosmic Rays," Invited Colloquium, Max Planck Institute for Astronomy, Heidelberg, Germany, July 2023

222. "Some New Black Hole Results", Invited Seminar, Max Planck Institute for Astronomy AGN Discussion Group, Heidelberg, Germany, July 2023

221. "Progress and Lessons (on Particle Dark Matter) from The Simulations", Invited Talk, Simons Symposium on "Illuminating Dark Matter," Schloss Elmau retreat, Germany, June, 2023

220. "The Necessary Causal Conditions for Disk Formation and the End of Bursty Star Formation" Invited remote Seminar, Harvard Center for Astrophysics, May 2023

219. "The Fundamental Importance and Uncertainties of Cosmic Rays (and Magnetic Fields) on Galactic Scales", Invited Review Talk, Midwest Magnetic Fields Conference, hosted by University of Wisconsin Madison, May 2023

218. "How Do Disks Settle and Transition to Milky Way-Like Structures", Invited Seminar, Institute for Astrophysics Potsdam, Germany, May 2023

217. "Paradigm Shifts in Dark Matter", Invited Colloquium, University of Southern California, April 2023

216. "3 Paradigm Shifts: Dark Matter, Cosmic Rays, and Quasar Fueling", Mid-career prize Plenary Talk, American Astronomical Society High-Energy Astrophysics Division Meeting, Hawaii, March 2023

215. "Stellar Clustering in 4D", Invited Talk, UVEX Science Conference, Caltech, March 2023

214. "How Did the Universe Go From Bursty Spheroids to Smooth Disks?" Invited Seminar, Swinburne University, Melbourne, Australia, December 2022

213. "What Dust Does to Galactic Winds", Invited Talk, Supernova and Dust Tele-Talk Series, SETI Institute, October 2022

212. "What Causes the Formation of Disks and Cessation of Bursty Star Formation?", Invited Talk, Conference "Disk Settling Symposium 2022", UC Irvine, September 2022

211. "The Next Generation of FIRE", Invited Conference Review Talk, Conference "GALFRESCA", Caltech, September 2022

210. "What's Wrong with Cosmic Rays", Invited Talk, Conference "Santa Cruz Galaxy Formation Conference", UC Santa Cruz, August 2022

209. "AGN Winds from the Torus and New Forms of Variability", Invited Seminar, Durham University, Durham, UK, June 2022

208. "Cosmic Rays, Dust, Stars and Black Holes Up to Galaxies" Invited Plenary Talk, Conference "From Stars to Galaxies", Chalmers University, Sweden, June 2022

207. "From Micro to Macro: How Stars, Dust, and Cosmic Rays Change the Universe" Invited Colloquium, Shanghai Astronomical Observatory, April 2022

206. "What's Wrong With Cosmic Rays?" Invited Talk, Conference "Breakthroughs in Galaxy Formation", Ringberg Castle, Germany, April 2022

205. "New Instabilities Everywhere: Dusty Astrophysical Plasmas" Invited Colloquium, McGill University, November 2021

204. "FIRE-3: New Physics at the Frontier" Invited Talk, University of Pennsylvania, Galaxies Seminar, April 2021

203. "From Micro to Macro": Feedback, Cosmic Rays, & Dust" Invited Colloquium, Durham University ICC, Durham, UK, February 2021

202. "High Redshift Galaxies: Where the Models Are Today" Invited Review Talk, Richard Ellis Celebration Conference, Pasadena, CA, August 2020 (rescheduled for COVID-19)

201. "Astrophysical Dust and Cosmic Rays: Fundamentally Novel Plasma Physics Interactions" Invited Talk, Conference "ASTRONUM International Conference on Numerical Modeling of Space Plasma Flows" Pasadena, CA, July 2020 (rescheduled for COVID-19)

200. "Galactic Disc Formation and Evolution" Invited Plenary Talk, Conference "The Physics of Star Formation: From Stellar Cores to Galactic Scales" Lyon, France, June 2020 (rescheduled for COVID-19)

199. "Formation of Globular Clusters in Cosmological Simulations" Invited Talk, Conference "Uncovering the Physics of Formation of Globular Clusters" KITP, Santa Barbara, May 2020 (conference cancelled for covid-19)

198. "Dissipative Dark Matter: Novel Constraints and Frontiers" Invited Talk, Simons Foundation Symposium "Illuminating Dark Matter (2)," Germany, April 2020 (remote for covid-19)

197. "Incorporating Novel Plasma Physics in Galaxy Simulations" Invited Talk, Conference "Computational Galaxy Formation," Ringberg Castle, Germany, April 2020 (cancelled for covid-19)

196. "Dust in Traps and Outflows" Invited Talk, Conference "The Building Blocks of Planets" Germany, April 2020 (cancelled for covid-19)

195. "The Future of FIRE" Invited Talk, FIRE Workshop 2020, UT Austin, March 2020

194. "The Physics of Relativity and Time Travel" Invited Public Lecture, Los Angeles Gallifrey One Convention, Los Angeles, February 2020

193. "Turbulence and Dust in the ISM" Invited Talk, Conference " Cosmic turbulence and magnetic fields," Cargese, France, November 2019

192. "New Physics in Galaxy Formation" Invited Talk, GalFRESCA Conference, UC Irvine, August 2019

191. "Resonant Drag Instabilities Across Physical Systems" Invited Talk, "Turbulence and Structure Formation in Protoplanetary Disks," Ringberg Castle, Germany, July 2019

190. "Cosmic "Dust" (Galaxies, Stars, and Actual Dust)!" Colloquium, Caltech, May 2019

189. "Updates on FIRE" Invited Talk, KITP GAIA Workshop, April 2019

188. "Galaxies and Stars as Engines" Colloquium, Pomona College, April 2019

187. "The Next Generation of Dark Matter Searches" Invited Talk, Simons Center for Computational Astrophysics, April 2019

186. "The Most Uncertain Physics in Galaxy Formation" Invited Talk, Conference "Big Eyes on the Universe," UCLA, January 2019

185. "Dust to Dust: Galaxies, Stars, and (Actual) Dust" Colloquium, Mount Stromlo Observatory, Australian National University, Canberra, December 2018

184. "(The ISM+Dust in) Galaxy Simulations" Invited Plenary Talk, van de Hulst Centennial Symposium, Leiden, Netherlands, November 2018

183. "Updates on FIRE" Invited Talk, GalFRESCA Conference, Caltech, August 2018

182. "Numerical Breakthroughs in Mesh-Free and Moving-Mesh Methods from Astrophysics" Invited Plenary Talk, IUPAP Conference on Computational Physics, UC Davis, July 2018

181. "How Dust Might Change Everything" Overview Talk, Flatiron KSPA Summer School, Flatiron Institute, June 2018

180. "Is There Any (Gravitational) Case for Non-Standard Dark Matter?" Invited Talk, Simons Foundation Symposium "Illuminating Dark Matter," Germany, May 2018

179. "Feedback & Dark Matter: Are there Actually Small-Scale Challenges?" Colloquium, Joint Kavli Institute for Cosmological Physics-University of Chicago Colloquia, May 2018

178. "A New Class of Instabilities in Dusty Gas" Colloquium, Joint Institute for Advanced Studies-Princeton Astrophysics Colloquia, April 2018

177. "Numerical Lessons in Modeling Star and Galaxy Formation" Invited Talk, Conference "Computational Galaxy Formation," Ringberg Castle, Germany, March 2018

176. "Star Formation on All Scales" Colloquium, University of Southern California, February 2018

175. "Big Bang to Milky Way: The Universe On a Computer" Public Lecture Series, Los Angeles Astronomical Society, November 2017

174. "Stars Shaping Galaxies: New Understanding of Structure in CDM" Colloquium, Case Western Reserve University, November 2017

173. "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

172. "The Resonant Drag Instability: Implications Across Astrophysical Scales" Colloquium, University of California, Berkeley, October 2017

171. "Making Galaxies on a Computer" Public Lecture, Brisbane Boys College, September 2017

170. "Stars Re-Shaping Galaxies" Colloquium, Swinburne University, Australia, September 2017

169. "Dust is Not Gas" Colloquium, Monash University, Australia, September 2017

168. "Updates on FIRE and other Work" Invited Talk, Santa Cruz Galaxy Formation Workshop, Santa Cruz, August 2017

167. "New Instabilities in Dusty Gas" Colloquium, Jet Propulsion Laboratory (JPL), August, 2017

166. "Linking Star Formation Across Scales" Invited Review Talk, "Linking Observations and Theory Across the Scales of Star Formation in Galaxies" , Sexten, Italy, July 2017

165. "FIRE and the Baryon Cycle" Invited Talk, "Whereabouts and Physics of the Roaming Baryons in the Universe" , Sexten, Italy, July 2017

164. "The Resonant Drag Instability: A New Class of Instabilities in Dusty Gas" Invited Talk, "Disk Instabilities across cosmic scales" , Sexten, Italy, July 2017

163. "Stars Re-Shaping Galaxies (aka Feedback: Now with Physics)" Colloquium, Johns Hopkins University, Baltimore, Maryland, April 2017

162. "Stars, Galaxies, and the State of Cold Dark Matter" Colloquium, University of Wyoming (Physics Department), Laramie, Wyoming, April 2017

161. "A New Approach to Turbulence" Colloquium, University of Wyoming (Math Department), Laramie, Wyoming, April 2017

160. "New Numerical Methods and Breakthroughs in High-Dynamic Range Simulations" Colloquium, Flatiron Institute (Simons Center for Computational Astrophysics), New York, February 2017

159. "Feedback: Nature Hates Theorists" Invited Talk, "The Galactic Renaissance," Caltech, February 2017

158. "Updates on FIRE" Summary Talk, FIRE (Feedback in Realistic Environments) project workshop, University of California San Diego, January 2017

157. "Feedback: Now with Physics" Plenary Talk, Warner Prize Lecture, American Astronomical Society Meeting 229, Grapevine, Texas, January 2017

156. "The State of Feedback In Realistic Environments" Conference Summary Talk, GALFRESCA workshop, Caltech, September 2016

155. "AGN Feedback" Invited Review Talk, Conference, "Mapping the Pathways of Galaxy Transformation," Catalina Island, July 2016

154. "AGN: What's in a Name?" Plenary & Conference Summary Talk, Conference "AGN: What's in a Name?" ESO, Garching, Germany, June 2016

153. "Numerics, Physics, Resolution: Towards Predictive Simulations of Galaxy Formation" Invited Talk, Conference "Computational Galaxy Formation," Ringberg Castle, Germany, May 2016

152. "Stars Shaping Galaxies" Invited Talk, Conference "What Shapes Galaxies," Space Telescope Science Institute, April 2016

151. "Stellar Feedback and Galaxy Formation" Colloquium, McMaster University, Hamilton, Canada, March 2016

150. "The Radical Impact of Stellar Feedback on Galaxies" Invited Seminar, Canadian Institute for Theoretical Astrophysics (CITA), Toronto, Canada, March 2016

149. "Updates on FIRE" Summary Talk, FIRE (Feedback in Realistic Environments) project workshop, University of California Berkeley, January 2016

148. "Why You Have to Do Feedback Right" Invited Seminar, University of Sydney, December 2015

147. "Turbulence and Stellar Feedback: It Changes Everything" Colloquium, Australian National University, December 2015

146. "The Dramatic Implications of Feedback for Star Formation" Colloquium, University of Michigan, December 2015

145. "Stellar Feedback: Its Role and Effects" Invited Seminar, Michigan State University, December 2015

144. "The Dramatic Effects of Stellar Feedback" Colloquium, NASA Goddard Space Flight Center, October 2015

143. "Why Stellar Feedback Matters for Galaxy Formation" Invited Seminar, University of Maryland, October 2015

142. "Feedback from Stars: How it Shapes Galaxies" Colloquium, University of California Santa Barbara, October 2015

141. "The Dramatic Effects of Stellar Feedback on Galaxy Formation" Colloquium, Institute for Theory and Computation, Harvard University, September 2015

140. "The Surprising Dynamics of Dust: Implications for Stellar Abundances" Invited Presentation, Institute for Theory and Computation, Harvard University, September 2015

139. "A New Approach To Turbulence" Invited Talk, International Astronomical Society Meeting (Focus Meeting 18), Honolulu, Hawaii, August 2015

138. "Theoretical Speculations" Invited Talk, COSMOS Team Meeting in Honor of Nick Scoville, Honolulu, Hawaii, August 2015

137. "Cosmological Simulations: The Feedback Frontier" Invited Talk, International Astronomical Society Meeting (Division J), Honolulu, Hawaii, August 2015

136. "Feedback Regulates Star Formation." Invited Review Talk, International Astronomical Society Meeting, Honolulu, Hawaii, August 2015

135. "Cosmological Simulations: The Gas Dynamics Frontier." Invited Review Talk, American Physical Society Meeting, April, 2015

134. "Simulating a Galaxy On a Computer." Seminar, Cal State Los Angeles, January 2015

133. "Galaxy Simulations: The State of the Art." Seminar, Cal Poly Pomona, November 2014

132. "Lighting the Circum-Galactic Medium on FIRE: Feedback and Galaxy Winds." Colloquium, University of Colorado, Boulder, November 2014

131. "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

130. "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

129. "Galaxies on FIRE: Feedback and the Self-Regulation of Star Formation." Seminar, Princeton University, September 2014

128. "GIZMO: New, Accurate Meshless Methods for Hydrodynamics." Invited Talk, Conference, "AREPO-fest 2014," Harvard University, September 2014

127. "Updates on FIRE (Feedback in Realistic Environments)" Invited Talk, Santa Cruz Galaxy Formation Workshop, UC Santa Cruz, August 2014

126. "Making Galaxies on a Computer." Invited Public Talk, "Pixar University" Lecture Series, Pixar Headquarters, Emeryville, CA, August 2014

125. "GIZMO: New Methods for Numerical Hydrodynamics." Invited Talk, FIRE (Feedback in Realistic Environments) Workshop, Northwestern University, July 2014

124. "Feedback: Linking Scales from Molecular Cloud Cores to Galaxy Clusters." Joint Colloquium, Heidelberg University & MPIA, July 2014

123. "What Doesn't Quench Galaxy Formation?" Invited Talk, Conference, "Quenching and Quiescence," Heidelberg University, Germany, July 2014

122. "Galactic Winds with Realistic Feedback: Implications for Future IFU Surveys." Invited Talk, Conference, International Astronomical Union Symposium, Vienna, Austria, July 2014

121. "Feedback from Stars and Black Holes in Galaxy Formation." Colloquium, Institute for Physics and Mathematics of the Universe (IMPU), Tokyo, June 2014

120. "Galaxies on FIRE: Why Are Galaxies Such Lightweights?" Solicited Press Conference, American Astronomical Society Meeting 224, Boston, June 2014

119. "Galaxies on FIRE: Stellar Feedback Explains Inefficient Star Formation." Contributed Talk, American Astronomical Society Meeting 224, Boston, June 2014

118. "Stellar Feedback Explains Inefficient Star Formation: What Else Can it Do?" Invited Talk, Conference, "Gas in and Around Galaxies," Ringberg Castle, Germany, May 2014

117. "The Job Market: An Informal Discussion." Invited Talk, Caltech-Carnegie-JPL Pasadena Area Postdoc Retreat, Lake Arrowhead, California, April 2014

116. "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

115. "Galaxy Formation Simulations: Prospects and Challenges" Invited Talk, Conference "Approaching Exascale", The University of California High-Performance AstroComputing Center, Lawrence Berkeley Labs, March 2014

114. "Feedback in Galaxy Formation and Implications for 3D Surveys" Invited Talk, Conference "3D2014: Gas and stars in galaxies" ESO, Garching, Germany, March 2014

113. "Cosmological Simulations: Now With Physics!" Colloquium, National Radio Astronomy Observatory, Socorro, March 2014

112. "Turbulence and IMF Variation: Jeans is Dead" Invited Talk, Conference "The Near-Field Deep-Field Connection" UC Irvine, February 2014

111. "How Supernovae Tell Us About the History of Our Universe" Public Talk, California Institute of Technology, February 2014

110. "Feedback, Galaxy Formation, and the Future" Colloquium, Jet Propulsion Laboratory, Pasadena, December 2013

109. "Galaxy Formation With Realistic Stellar Feedback" Invited Talk, Center for Astrophysics and Space Science, UC San Diego, December 2013

108. "Cosmological Simulations: Now With Physics!" Invited Talk, ESO Conference "Deconstructing Galaxies: Structure and Morphology in the Era of Large Surveys", Santiago, Chile, November 2013

107. "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

106. "Realistic Stellar Feedback: Why It Matters" Colloquium, Canadian Institute for Theoretical Astrophysics (CITA), Toronto, Canada, September 2013

105. "Cosmological Simulations: Now With Physics!" Colloquium, Carnegie Observatories, Pasadena, September 2013

104. "The Monster Roars: AGN Feedback and Co-Evolution with Galaxies" Invited Review Talk, Conference "Fifty Years of Quasars," California Institute of Technology, September 2013

103. "Outflows in Cosmological Simulations with Explicit Stellar Feedback: Why it Matters" Invited Talk, Conference "Outflows at UCSB", University of California Santa Barbara, August 2013

102. "Cosmological Simulations With Explicit Stellar Feedback" Invited Talk, Santa Cruz Galaxy Formation Workshop, UC Santa Cruz, August 2013

101. "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

99. "Feedback and Galaxy Formation" Colloquium, Stanford University, February 2013

98. "The Origins of ISM Structure, the Stellar IMF, and (perhaps) Planet Formation" Invited Protostars and Planets Seminar, University of California Berkeley, February 2013

97. "Fluid Mixing in Smooth-Particle Hydrodynamics" Invited Talk, Conference "The Future of SPH," Max-Planck-Institute for Astrophysics, Munich, February 2013

96. "Star Formation, Black Holes, and Feedback in Galaxy Formation" Colloquium, University of Victoria, Victoria, Canada, February 2013

95. "Does Stellar Feedback Solve Dark Matter Problems?" Invited Talk, Harvard University Center for Astrophysics, January 2013

94. "A New Approach to Turbulence" Bok Prize Colloquium, Harvard University Center for Astrophysics, January 2013

93. "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

92. "Understanding the Evolution of Black Holes, Stars, and Galaxies at High Resolution" Invited Talk, Einstein Fellowship Symposium, Harvard-Smithsonian Center for Astrophysics, October 2012

91. "Star Formation, Black Holes, & Feedback in Galaxy Formation" Colloquium, Mount Stromlo Observatory, Australian National University, Canberra, August 2012

90. "Turbulence and the Structure of the Interstellar Medium" Invited Talk, Conference "Galaxy Formation 2012," University of California Santa Cruz, August 2012

89. "Feedback: Now with Physics" Invited Talk, Conference "Galaxy Formation 2012," University of California Santa Cruz, August 2012

88. "ISM Structure, Stellar Clustering, & a (Nearly) Universal IMF" Invited Talk, Conference "Galactic Star Formation," University of Heidelberg, Germany, August 2012

87. "Galactic Winds, Star Formation, and Feedback" Invited Talk, Conference "Gas, Stars and Black Holes in the Galaxy Ecosystem," Lorentz Center, Leiden, Netherlands, July 2012

86. "Feedback in Simulations and Observations" Invited Talk, CANDELS Team Meeting, Lorentz Center, Leiden, Netherlands, May 2012

85. "Galaxy Formation and Feedback Processes" Colloquium, Cambridge University Institute of Astronomy, March 2012

84. "Towards Realistc Feedback Processes in the ISM and Star Formation" Invited Talk, Conference "Cosmic-ray Induced Phenomenology in Star-Forming Environments," Barcelona, Spain, April 2012

83. "Galaxy Mergers, Starbursts, and Black Hole Fueling" Invited Talk, Conference "Interacting Galaxies and Binary Quasars," Trieste, Italy, April 2012

82. "Star Formation, Black Holes, & Feedback in Galaxy Formation" Colloquium, Harvard University Center for Astrophysics, March 2012

81. "Star Formation, Black Holes, & Feedback in Galaxy Formation" Colloquium, University of Washington, Seattle, February 2012

80. "The Structure of the Interstellar Medium, Stellar Feedback, and Galaxy Formation" Colloquium, University of Chicago, Kavli Institute for Cosmological Physics, February 2012

79. "Advanced Galaxy Formation: Star Formation & Black Holes" Colloquium, Columbia University, February 2012

78. "The Structure of the Interstellar Medium: Turbulence, Gravity, and Feedback" Colloquium, Massachusetts Institute of Technology, February 2012

77. "Star Formation, Black Holes, & Feedback in Galaxy Formation" Colloquium, University of Maryland, February 2012

76. "Star Formation, Black Holes, & Feedback in Galaxy Formation" Colloquium, The Ohio State University, January 2012

75. "Feedback from Stars and Black Holes in Galaxy Formation" Invited Talk, *Watching Galaxies Grow Up* Ringberg Castle, Germany, December 2011

74. "How Do Black Holes Get (and Get Rid of) Their Gas?" Invited Talk, Einstein Fellowship Symposium, NASA Goddard, October 2011

73. "Feedback from Stars and Black Holes in Galaxy Formation" Colloquium, University of California Los Angeles, October 2011

72. "Stellar Feedback in Galaxy Formation" Seminar, University of California Irvine, October 2011

71. "Feedback-Regulated Star Formation" UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2011

70. "Quasar Feedback in Galaxies" Invited Review Talk, *Galaxy Formation 2011* Durham University, England, July 2011

69. "Feedback-Regulated Star Formation on Galactic Scales" Invited Talk, *Star Formation in Galaxies, the Herschel Era* Ringberg Castle, Germany, June 2011

68. "Gas, Mergers, and Feedback: Driving an Evolving Hubble Sequence" Colloquium, University of Arizona, Tucson, February 2011

67. "The Origin of the Hubble Sequence: Gas, Mergers, and Feedback from Stars and Black Holes" Colloquium, University of California at Berkeley, February 2011

66. "Gas, Mergers, and Feedback: Their Role in Galaxy Formation" Colloquium, University of California at Santa Cruz, January 2011

65. "How Do Massive Black Holes Get Their Gas?" Colloquium as Beatrice Tinsley Visiting Research Scholar, University of Texas, Austin, November 2010

64. "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

63. "Super-Massive Black Hole Growth and Feedback," Invited Talk, The Ohio State University, October 2010

62. "How To Grow a Black Hole," Colloquium, University of California at Santa Cruz, October 2010

61. "How Do Massive Black Holes Get Their Gas (And Get Rid of It)?" Colloquium, University of California at Berkeley, September 2010

60. "Black Hole Fueling and Feedback in Massive Starbursts" Colloquium, University of Maryland, College Park, September 2010

59. "How Do Black Holes Get Their Gas?" Invited Talk, UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2010

58. "Dealing with Large Ensembles of Simulations", Invited Lecture, *Astro-Computing* Summer School on Galaxy Simulations, University of California at Santa Cruz, August 2010

57. "How Do Black Holes Get Their Gas?" Invited Talk, *What Drives the Growth of Black Holes?* Durham University, England, July 2010

56. "Gas, Galaxy Mergers, and Feedback: Diversity and Structure in the Hubble Sequence," Invited Talk, *Extreme Starbursts in the Local Universe* Granada, Spain, June 2010

55. "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

54. "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

53. "Gas & Galaxy Mergers: Building the Hubble Sequence," TAPIR Seminar, California Institute of Technology, May 2010

52. "Black Holes, Starbursts, and Gas Inflows" Colloquium, Columbia University, April 2010

51. "How Do Massive Black Holes Get Their Gas?" Seminar, Princeton University, April 2010

50. "Fueling Massive Black Holes and Building Galactic Nuclei," Herzberg Institute of Astrophysics, Victoria, Canada, March 2010

49. "Gas Inflows in Mergers, Starbursts, and AGN," Joint Colloquium, University of Virginia/NRAO, March 2010

48. "Feeding and Feedback from Massive Black Holes," ACKS Seminar/Colloquium, SLAC, February 2010

47. "How Do Massive Black Holes Get Their Gas?" Invited Talk, *Formation and Evolution of Black Holes* Aspen Winter Conference, February 2010

46. "Galaxy Mergers: A Factory for Ellipticals, Quasars, Feedback, and Even Disks?" Colloquium, Space Telescope Science Institute, October, 2009

45. "Quasars, Feedback (and Galaxy Formation)," Joint Astronomy Colloquium, MPE Garching, Germany, October 2009

44. "Dissipation, Mergers, and the Formation of Bulges and Disks," Seminar, MPA Garching, Germany, October 2009

43. "Galaxy Mergers: Quasars, Ellipticals, and Disks," Theory Seminar, Paris Institute of Astrophysics (IAP), France, September 2009

42. "Galaxy Mergers: What Can They Do For You?," Seminar, Observatoire de Paris, France, September 2009

41. "Gas & Galaxy Mergers: More Important than You Think," Invited Talk, *Assembly, Gas Content and Star Formation History of Galaxies*, Charlottesville, VA, September 2009

40. "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

39. "Galaxy Collisions: A Factory for Ellipticals, Quasars, Feedback, and Disks," Plenary Talk, *214th Meeting of the American Astronomical Society*, Pasadena, CA, June 2009

38. "Galaxy Mergers, Quasars, and the Formation of Massive Spheroids," Colloquium, Yale University, April 2009

37. "The Role of Dissipation in Galaxy Mergers," Colloquium, University of California at Santa Cruz, April 2009

36. "Galaxy Mergers and AGN Feedback," Seminar, University of California at Davis, March 2009

35. "The First Napa Meeting," Conference Summary Talk, *The 2009 Napa Galaxy Formation and Evolution Workshop*, Napa, CA, February 2009

34. "Disk Survival & the Importance of Dissipation in Mergers," Invited Talk, *The 2009 Napa Galaxy Formation and Evolution Workshop*, Napa, CA, February 2009

33. "Quasars, Feedback, and Galaxy Formation," Colloquium, California Institute of Technology, January 2009

32. "Galaxy Mergers: Quasars, Feedback, and Galaxy Morphology," Seminar, University of California Santa Barbara, January 2009

31. "Quasars, Feedback, and Galaxy Formation," Plenary Talk, *24th Texas Symposium on Relativistic Astrophysics*, Vancouver, Canada, December 2008

30. "Galaxy Collisions: A Factory for Quasars, Feedback, Ellipticals, and even Disks?," Colloquium, The Ohio State University, December 2008

29. "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

28. "The Merger-AGN Connection: What Models Say and How Observations Can Show Them Wrong," Invited Talk, *The Starburst-AGN Connection*, Shanghai, China, October 2008
27. "Galaxy Collisions: A Factory for Quasars, Feedback, Ellipticals, and even Disks?," Colloquium, University of Washington, October 2008
26. "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
25. "Quasars and Feedback in Galaxy Interactions," Cosmology Seminar, CITA, April 2008
24. "Quasars, Feedback, & Galaxy Interactions," Colloquium Series as Beatrice Tinsley Visiting Research Scholar, University of Texas, Austin, April 2008
23. "Mergers and Dissipation in Spheroid Formation," Seminar, Princeton University, February 2008
22. "Quenching Models: Their Interplay & Degeneracies," Invited Talk, *Panoramic Views of Galaxy Formation and Evolution*, Hayama, Japan, December 2007
21. "The Role and Evidence of Dissipation in Elliptical Formation," KIPAC Cosmology Seminar, Stanford University, December 2007
20. "Quasars, Mergers, and Spheroid Evolution," Invited Talk, *Galaxy and Black Hole Evolution: Towards a Unified View*, University of Arizona, Tucson, November 2007
19. "The Role of Dissipation in Spheroid Formation," TAC Seminar, University of California, Berkeley, November 2007
18. "AGN and Galaxy Formation," Seminar, Institute for Advanced Study, Princeton, October 2007
17. "AGN and Cosmology: Overview and Context," Keynote Talk, CCAPP AGN Workshop, The Ohio State University, October 2007
16. "Fundamental Planes and Galaxy Formation," Invited Lecture Series, Novicosmo Summer School on Galaxy Formation, Novigrad, Croatia, September 2007
15. "The Merger-Driven Star Formation History of the Universe," Invited Talk, KITP Conference: *Star Formation Then and Now*, August 2007
14. "Beyond $M_{\rm BH}-\sigma$," IAU Symposium, Oxford University, July 2007
13. "Merger-Driven Evolution of Galaxies & Quasars," Colloquium, Imperial College, London, July 2007
12. "Different Ways to Quench: Breaking Degeneracies," UCSC Galaxy Formation Workshop, University of California Santa Cruz, August 2007
11. "Connecting AGN and the Red Sequence Transition," Review Talk, COSMOS Collaboration Meeting, New York, June 2007
10. "Mergers, AGN, & Quenching," Invited Talk, *The Impact of AGN Feedback on Galaxy Formation*, Ringberg Castle, Germany, May 2007
9. "The Impact of Quasar Feedback on the Formation of Red Galaxies," Invited Talk, EGS Collaboration Workshop, University of California, Berkeley, December 2006
8. "Mergers, Quasars, & Elliptical Galaxies," TAC Seminar, University of California, Berkeley, December 2006
7. "Quasars and Quenching of Red Galaxies," Invited Talk, *Massive Galaxies through Cosmic Time II*, University of Arizona, Tucson, November 2006
6. "Quasars, Mergers and the Buildup of Elliptical Galaxies," Invited Talk, *From the Local Universe to the Red Sequence*, Space Telescope Science Institute, October 2006
5. "The Origins & Evolution of the Quasar Luminosity Function," Seminar, MPIA Heidelberg, July 2006
4. "Uniting Mergers, Quasars, & Elliptical Galaxies," Invited Lecture Series, MPA Garching, July 2006
3. "AGN Feedback: Quasars, Mergers, & Galaxy Formation," Seminar, University of Texas, Austin, April 2006
2. "Quasars, Mergers, and Galaxy Formation," Colloquium, University of Arizona, Tucson, March 2006
1. "AGN Feedback," Seminar, Carnegie Institute, Pasadena, March 2006
0. "A Unified Model of Quasar Formation," Seminar, Princeton University, May 2005