

Jeong-Gyu Kim | List of Publications

Publications

Journal Publications – ADS Search.....

** Most important publications ; # Led by a student under direct supervision

14. *Efficiently Cooled Stellar Wind Bubbles in Turbulent Clouds: II. Numerical Simulations and Theory Compared*
Lancaster, L., Ostriker, E. C., **Kim, J.-G.**, & Kim, C.-G., *ApJ* accepted
13. *Efficiently Cooled Stellar Wind Bubbles in Turbulent Clouds: I. Theory and Applications to Star-Forming Clouds*
Lancaster, L., Ostriker, E. C., **Kim, J.-G.**, & Kim, C.-G., *ApJ* accepted
12. ** *Star Formation Efficiency and Dispersal of Giant Molecular Clouds with UV Radiation Feedback: Dependence on Gravitational Boundedness and Magnetic Fields*
Kim, J.-G., Ostriker, E. C., & Filippova, N. arxiv:2011.07772 *ApJ* accepted
11. *The environmental dependence of the X_{CO} conversion factor*
Gong, M., Ostriker, E. C., Kim, C.-G., & **Kim, J.-G.** 2020, *ApJ*, 903, 142
10. *Factories of CO-dark gas: molecular clouds with limited star formation efficiencies by far-ultraviolet feedback*
Inoguchi, M., Hosokawa, T., Mineshige, S., & **Kim, J.-G.** 2020, *MNRAS*, 497, 50611
9. # *Diffuse Ionized Gas in Simulations of Multiphase, Star-forming Galactic Disks*
Kado-Fong, E., **Kim, J.-G.**, Ostriker, E. C., & Kim, C.-G. 2020, *ApJ*, 897, 143
8. *Modeling UV Radiative Feedback from Massive Stars: III. Escape of Radiation from Star-Forming Giant Molecular Clouds*
Kim, J.-G., Kim, W.-T., & Ostriker, E. C. 2019, *ApJ*, 883, 102
7. ** *Modeling UV Radiative Feedback from Massive Stars: II. Dispersal of Star-Forming Giant Molecular Clouds by Photoionization and Radiation Pressure*
Kim, J.-G., Kim, W.-T., & Ostriker, E. C. 2018, *ApJ*, 859, 68
6. *Modeling UV Radiative Feedback from Massive Stars: I. Implementation of Adaptive Ray Tracing Method and Tests*
Kim, J.-G., Kim, W.-T., Ostriker, E. C., & Skinner A. M. 2017, *ApJ*, 851, 93
5. *Disruption of Molecular Clouds by Expansion of Dusty H II Regions*
Kim, J.-G., Kim, W.-T., & Ostriker, E. C. 2016, *ApJ*, 819, 137
4. *Instability of Magnetized Ionization Fronts Surrounding H II regions*
Kim, J.-G., Kim, W.-T. 2014, *ApJ*, 797, 135
3. *Nature of Wiggle Instability of Galactic Spiral Shocks*
Kim, W.-T., Kim, Y., & **Kim, J.-G.** 2014, *ApJ*, 789, 68

2. *Instability of Evaporation Fronts in the Interstellar Medium*
Kim, J.-G., Kim, W.-T. 2013, ApJ, 779, 48
1. *Gravitational Instability of Rotating, Pressure-Confined, Polytropic Gas Disks with Vertical Stratification*
Kim, J.-G., Kim, W.-T., Seo Y. M., & Hong, S. S. 2012, ApJ, 761, 131

Papers in Preparation.....

Implementation of a Module for Heating and Cooling in the ISM Coupled with Radiative Transfer

Kim, J.-G., Gong, M., Kim, C.-G., & Ostriker, E. C. 2021, *in preparation*

Molecular Cloud Destruction Controlled by Radiation, Winds, and Supernovae Feedback

Kim, J.-G., Lancaster, L., Kim, C.-G., & Ostriker, E. C. 2021, *in preparation*

r-process Enrichment During the Formation of a Globular Cluster: Case of M15

Hotokezaka, K., **Kim, J.-G.**, Beniamini, P., & Cen, R. 2021, *in preparation*