

Abstract Submitted  
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**Particle energization and radiation in magnetized black hole accretion**<sup>1</sup> EDISON LIANG, GUY HILBURN, Rice University, SIMING LIU, HUI LI, Los Alamos National Laboratory, CHARLES GAMMIE, University of Illinois — We study nonthermal electron heating by MHD turbulence generated by the magneto-rotational instability in magnetized accretion flows onto black holes. Using a combination of relativistic MHD, Fokker-Planck and Monte Carlo simulations, we study the spectral and temporal properties of the radiation output, and their dependence on the disk input parameters. Of particular interest are the roles of the magnetic field and density of the initial plasma.

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