With the launch of the Fermi Gamma-ray Space Telescope in 2008, gamma-ray astronomy has undergone a period of extraordinary advances. After reviewing the instrument, its capabilities, and some major discoveries, I focus on black-hole sources of GeV and TeV radiation. Blazar active galactic nuclei (supermassive black holes with jets) and gamma-ray bursts (transient emissions from newly born black holes) are argued to be the most probable sites for the acceleration of the ultra-high energy cosmic rays (UHECRs), which are subatomic particles that individually carry Joules of energy. According to the scenario proposed here, UHECRs are energized through shock acceleration processes in the jets of rotating black holes.

**TIME:** 4:00-4:50 pm, Thursday the 21st of October 2010  
(refreshments: 3:45pm)  
**PLACE:** 101 Corcoran Hall, GWU  
725 21st Street, N.W. (Between G and H Streets)  
**METRO STATION:** GWU/FOGGY BOTTOM (BLUE & ORANGE LINES)