Studying Accretion Disc Radiation via a Monte Carlo Emission and Scattering Code

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In the last year, we have modeled Sagittarius A*'s emission by simulating its accretion disc with a general relativistic magnetohydrodynamic code, then using our Monte Carlo emission and scattering code to simulate emergent spectra. This code has recently been updated to include anisotropic magnetic fields, which will make it a much more powerful theoretical tool. Changes to the code will be discussed, as will a number of other alterations to this project which provide a very consistent simulation platform for modeling of AGN's, as well as other astrophysical objects.

8th International Conference on High Energy Density Laboratory Astrophysics
March 15-18, 2010
California Institute of Technology
Pasadena, California, USA
http://hedla2010.caltech.edu/