

D. Kazanas, K. Fukumura (NASA/GSFC): A Global Picture of AGN Winds

We present a unified structure for accretion powered sources across their entire luminosity range from accreting galactic black holes to the most luminous quasars, with emphasis on AGN and their phenomenology. Central to this end is the notion of MHD winds launched from the accretion disks that power these objects. This work, similar in spirit to that of Elvis of more than a decade ago, provides, on one hand, only the broadest characteristics of these objects, but on the other, also scaling laws that allow one to make contact with objects of different luminosity. The conclusion of this work is that AGN phenomenology can be accounted for in terms of \dot{m} , the wind mass flux in units of the Eddington value, the observer's inclination angle θ and α_{OX} the logarithmic slope between the O/UV and X-ray fluxes. However, given the well known correlation between α_{OX} and UV luminosity, we conclude that the AGN structure depends on only two parameters. The small number of model parameters hence suggests that an understanding of the global AGN properties maybe within reach.