

- **diskbb: accretion disk, power-law dependence for T(r)**

A multiple blackbody disk model where local disk temperature  $T(r)$  is proportional to  $r^{-p}$ , where  $p$  is a free parameter. The standard disk model, diskbb, is recovered if  $p = 0.75$ . If radial advection is important then  $p < 0.75$ . See the discussion and examples in, e.g., Mineshige et al. 1994, ApJ, 426, 308, Hirano et al. 1995, ApJ, 446, 350, Watarai et al. 2000, PASJ, 52, 133, Kubota and Makishima 2004, ApJ, 601, 428, Kubota et al. 2005, ApJ, 631, 1062.

par1             $T_{in}$ : temperature at inner disk radius (keV)

par2             $p$ : exponent of the radial dependence of the disk temperature

norm             $\left( \frac{(R_{in}/km)}{(D/10kpc)} \right)^2 \cos \theta$ , where  $R_{in}$  is “an apparent” inner disk radius,  $D$  the distance to the source, and  $\theta$  the angle of the disk ( $\theta = 0$  is face-on). On the correction factor between the apparent inner disk radius and the realistic radius, see e.g., Kubota et al. 1998, PASJ, 50, 667.