

- **kerrod: optically thick accretion disk around a Kerr black hole**

Optically thick extreme-Kerr disk model based on the same transfer-function used in the "laor" Kerr disk-line model. Local emission is simply assumed to be the diluted blackbody. See Laor 1991, ApJ, 376, L90 for explanation of the transfer function. See Ebisawa et al. 2003, ApJ, 597, 780 for examples of using this model.

- par1 = distance (kpc)
- par2 = spectral hardening factor, $T_{\text{col}}/T_{\text{eff}}$. Should be greater than 1.0, and considered to be 1.5-1.9 for accretion disks around a stellar-mass black hole. See, e.g., Shimura and Takahara, 1995, ApJ, 445, 780
- par3 = mass of the central object (solar unit)
- par4 = mass accretion rate (10^{18} g/s)
- par5 = disk inclination angle (deg; 0 for face-on)
- par6 = inner radius (units of GM/c^2). 1.235 is the last stable orbit.
- par7 = outer radius (units of GM/c^2)
- K = normalization factor. should be fixed to 1.