

- **refsch: reflected power law from ionized accretion disk**

Exponentially cut-off power-law spectrum reflected from an ionized relativistic accretion disk. In this model, spectrum of [pexriv](#) is convolved with a relativistic disk line profile `diskline`. See Magdziarz & Zdziarski 1995 MNRAS, 273, 837 for details of Compton reflection. See Fabian et al. 1989, MNRAS, 238, 729 for details of the disk line profile.

par1	Γ , power law photon index, $N_E \propto E^{-\Gamma}$
par2	E_c , cutoff energy (keV) (if $E_c = 0$ there is no cutoff)
par3	rel_{refl} , reflection scaling factor (0, no direct component < $rel_{\text{refl}} < 1$ for isotropic source above disk)
par4	redshift, z
par5	abundance of elements heavier than He relative to the solar abundances
par6	iron abundance relative to that defined by abund
par7	inclination angle (degrees)
par8	disk temperature in K
par9	disk ionization parameter, $\xi = 4\pi \frac{F_{\text{ion}}}{n}$, where F_{ion} is the 5eV – 20keV irradiating flux, n is the density of the reflector; see Done et al., 1992, ApJ, 395, 275.
par10 = ε	power law dependence of emissivity. the emissivity $\propto R^\varepsilon$
par11	inner radius (units of GM/c^2)
par12	outer radius (units of GM/c^2)
par13	internal model accuracy - points of spectrum per energy decade
norm	photon flux at 1 keV (photons $\text{keV}^{-1}\text{cm}^{-2}\text{s}^{-1}$) of the cutoff broken power-law only (no reflection) in the observed frame.