

- **bbody, zbody: blackbody**

A blackbody spectrum.

$$A(E) = \frac{K \times 8.0525 E^2 dE}{(kT)^4 \left[ \exp\left(\frac{E}{kT}\right) - 1 \right]}$$

where

par1=  $kT$                       temperature keV  
norm= K                       $\frac{L_{39}}{D_{10}^2}$ , where  $L_{39}$  is the source luminosity in units of  $10^{39}$  ergs<sup>-1</sup>,  
 $D_{10}$  is the distance to the source in units of 10 kpc

The **zbody** variant allows an additional (fixed) redshift parameter

$$A(E) = \frac{8.0525 K [E(1+z)]^2 dE}{(1+z) kT^4 (\exp[E(1+z)/kT] - 1)}$$

where

par1=  $kT$                       temperature keV  
 $z$                       Fixed redshift  
norm= K                       $\frac{L_{39}}{[D_{10}(1+z)]^2}$ , where  $L_{39}$  is the source luminosity in units of  $10^{39}$   
ergs<sup>-1</sup>,  $D_{10}$  is the distance to the source in units of 10 kpc