

spexpcut: super-exponential cutoff absorption

A high-energy super-exponential roll-off.

$$M(E) = \exp\left(-\left(\frac{E}{E_c}\right)^\alpha\right)$$

useful for fitting gamma-ray spectra of pulsars (see eg Nel & de Jager 1995), where:

par1 = E_c e-folding energy for the absorption

par2 = α exponent index

Caveat : the absorption for an energy bin is calculated as the arithmetic mean of the function value at the start and end energies of the bin. If the energy bins are large this can be inaccurate and the energies command should be used to define a finer energy grid on which to calculate the model.