

- **lsmooth: lorentzian smoothing**

Lorentzian smoothing with a variable width, which varies as the par2 power of the energy. The width at 6 keV is set with par1.

$$dC(E) = \frac{\Sigma(E)}{2\pi \left[ (E - X)^2 + (\Sigma(E)/2)^2 \right]} A(X) dX$$

$$\Sigma(E) = \sigma (E/6)^\alpha$$

where:

par1=  $\sigma$       lorentzian sigma at 6 keV

par2=  $\alpha$       power of energy for sigma variation