

## **simpl: comptonization of a seed spectrum**

An empirical convolution model of Comptonization in which a fraction of the photons in an input seed spectrum is scattered into a power-law component. The model is described in Steiner et al. (2008, in prep), with details related to the XSPEC implementation given in the appendix. It is designed for soft plasmas which are not Compton thick, and  $\Gamma > 1$ . When using this model, it may be necessary to extend the energy grid over which the model is calculated. This can be accomplished using the `energies` command.

par1	Gamma, the photon power law index.
par2	the scattered fraction (between 0 and 1).
par3	a flag to switch between up-scattering only ( $>0$ ) and both up- and down-scattering ( $\leq 0$ ).