

- **edge, zedge: absorption edge**

The edge model is absorption edge, given by.

$$M(E) = \begin{cases} 1 & E \leq E_c \\ \exp\left[-D(E/E_c)^{-3}\right] & E \geq E_c \end{cases}$$

where:

par1 =  $E_c$       threshold energy

par2 =  $D$       absorption depth at the threshold

The zedge model given by

$$M(E) = \begin{cases} 1 & E < E_c \\ \exp\left(-D[E(1+z)/E_c]^3\right) & E > E_c \end{cases}$$

allows a redshift  $z$  where:

par1 =  $E_c$       threshold energy

par2 =  $D$       absorption depth at threshold

par3 =  $z$       redshift