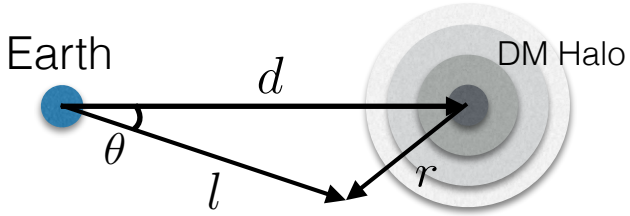
$$\rho_{zhao}(r) = \frac{\rho_s}{\left(\frac{r}{r_s}\right)^{\gamma}\left(1+\left(\frac{r}{r_s}\right)^{\alpha}\right)^{\frac{\beta-\gamma}{\alpha}}}$$

$$\rho_{burkert}(r) = \frac{\rho_s r_s^3}{(r_s+r)(r_s^2+r^2)}$$

$$\rho_{einasto}(r) = \rho_s E^{-\frac{2}{\alpha}\left(\left(\frac{r}{r_s}\right)^{\alpha}-1\right)}$$

$$J_{decay}(\theta) = \int_0^{2\pi}\int_0^{\infty}\int \rho(r(l,\theta'))Sin(\theta')d\theta' dl d\varphi$$

$$J_{annihilate}(\theta) = \int_0^{2\pi}\int_0^{\infty}\int \rho(r(l,\theta'))^2 Sin(\theta')d\theta' dl d\varphi$$



$$r = \sqrt{l^2 + d^2 - 2ldCos(\theta)}$$