D DIMENSIONAL SCHWARSCHILD METRIC

 $ds^{2} = \left(1 - \frac{R_{S}^{D-3}}{r^{D-3}}\right)dt^{2} + \left(1 - \frac{R_{S}^{D-3}}{r^{D-3}}\right)^{-1}dr^{2} + r^{2}d\Omega_{D-2}^{2}$

$$R_S^{D-3} = \frac{1}{4\pi^2 + m^2} \left(\frac{R_S^{D-3}}{4\pi^2 + m^2} \right)^{-1}$$