Metric

$$ds^2 = -\,dt^2 + \big(1 - f(r,t)\big)\,dr^2 + r^2\,d\theta^2 + r^2 \sin^2\theta\,d\phi^2$$

Curvature Invariants

$$R = \frac{r^2 f(r,t)\frac{\partial^2}{\partial t^2} f(r,t) - \frac{r^2\left(\frac{\partial}{\partial t} f(r,t)\right)^2}{2} - r^2 \frac{\partial^2}{\partial t^2} f(r,t) - 2r\frac{\partial}{\partial r} f(r,t) + 2f^2(r,t) - 2f(r,t)}{r^2\left(f^2(r,t) - 2f(r,t) + 1\right)}$$

Stress–Energy Tensor

$$T_{\mu\nu} = \left(\begin{matrix} \frac{2r(f(r,t)-1)^3\frac{\partial^2}{\partial t^2}f(r,t)+r(f(r,t)-1)^2\left(\frac{\partial}{\partial t}f(r,t)\right)^2-2r(f(r,t)-1)\frac{\partial^2}{\partial t^2}f(r,t)-r\left(\frac{\partial}{\partial t}f(r,t)\right)^2+4(f(r,t)-1)^3\left(-2f(r,t)-\frac{\partial}{\partial r}f(r,t)+2\right)-4(f(r,t)-1)^2\frac{\partial}{\partial r}f(r,t)}{64\pi r(f(r,t)-1)^4} \\ -\frac{\frac{\partial}{\partial t}f(r,t)}{16\pi r(f(r,t)-1)} \\ 0 \\ 0 \end{matrix}\right.$$