Table 1a : Metrics for the Coulomb and Ampère Maxwell Laws

Metric	Metrical Structure
Minkowski	$ds^2 = -c^2dt^2 + dx^2 + dy^2 + dz^2$, $g_{00} = -1$, $g_{11} = 1$, $g_{22} = 1$, $g_{33} = 1$
Schwarzschild	$ds^2 = -\left(1 - \frac{2GM}{rc^2}\right)c^2dt^2 + \left(1 - \frac{2GM}{rc^2}\right)^{-1}dr^2 + r^2d\theta^2 + r^2\sin^2\theta\, d\phi^2$, $g_{00} = -\left(1 - \frac{2GM}{rc^2}\right)$, $g_{11} = \left(1 - \frac{2GM}{rc^2}\right)^{-1}$, $g_{22} = r^2$, $g_{33} = r^2\sin^2\theta$
Gödel	$ds^2 = \frac{1}{2\omega^2}\left(-\left(dt + e^{x}dz\right)^2 + dx^2 + dy^2 + \frac{1}{2}e^{2x}dz^2\right)$ Diagonals and off-diagonals
FLRW	$ds^2 = -c^2dt^2 + a(t)\left(\frac{dr}{1-kr^2} + r^2d\theta^2 + r^2\sin^2\theta\, d\phi^2\right)$ $g_{00} = -1$, $g_{11} = \frac{a^2(t)}{1-kr^2}$, $g_{22} = a^2r^2$, $g_{33} = a^2r^2\sin^2\theta$ with: $\frac{\ddot{a}}{a} = -\frac{4\pi}{3}G(\rho + 3p)$, $\left(\frac{\dot{a}}{a}\right)^2 = \frac{8\pi}{3}G\rho - \frac{k}{a^2}$
General Spherical	$ds^2 = -e^{2\alpha(r,t)}c^2dt^2 + e^{2\beta(r,t)}dr^2 + r^2d\theta^2 + r^2\sin^2\theta\, d\phi^2$ $g_{00} = -e^{2\alpha}$, $g_{11} = e^{2\beta}$, $g_{22} = r^2$, $g_{33} = r^2\sin^2\theta$

Table 1a Continued

Metric	Metrical Structure
Cotters General	$ds^2 = -A\left(C(r)\right)^{1/2} dt^2 + B\left(C(r)\right)^{1/2} r^2 + C(r)\left(d\theta^2 + \sin^2\theta\, d\phi^2\right)$, where $C(r) = \left(\lvert r - r_0\rvert^n + \alpha^n\right)^{2/n}$
Cotters / Original Schwarzschild	$n = 3, \quad r_0 = 0, \quad r > r_0$
Cotters / Schwarzschild	$n = 1, \quad r_0 = \alpha, \quad r > r_0$
Cotters Type One	$ds^2 = -c^2 dt^2 + dr^2, \lvert r - r_0\rvert^2 \left(d\theta^2 + \sin^2\theta\, d\phi^2\right)$
Static de Sitter	$ds^2 = -\left(1 - \frac{r^2}{\alpha^2}\right) c^2 dt^2 + \left(1 - \frac{r^2}{\alpha^2}\right)^{-1} dr^2 + r^2 d\Omega^2$, $g_{00} = -\left(1 - \frac{r^2}{\alpha^2}\right)$, $g_{11} = \left(1 - \frac{r^2}{\alpha^2}\right)^{-1}$, $g_{22} = r^2$, $g_{33} = r^2 \sin^2\theta$.
Kasner	$ds^2 = -c^2 dt^2 + \sum_{j=1}^{D-1} t^{2p_j} (dx_j)^2$, $\sum_{j=1}^{D-1} p_j = 1, \quad \sum_{j=1}^{D-1} p_j^2 = 1, \quad D > 3$
Perfect Fluid Sphere	$ds^2 = -\left(1 + ar^2\right) c^2 dt^2 + \frac{\left(1 - 3ar^2\right)^{2/3}}{\left(1 + 3ar^2\right)^{2/3} - br^2} \cdot dr^2 + r^2 d\theta^2 + r^2 \sin^2\theta\, d\phi^2$
Friedmann Dust	$ds^2 = -c^2 dt^2 + \left(\cosh\left(\frac{3t}{a} - 1\right)\right)^{2/3} \left(x^2 + y^2 + z^2\right)$