Schwarzschild in Cylindrical Coordinates:

```
x^{\mu}
    x^0 = t.
    x^1 = \rho.
    x^2 = \phi.
    x^3 = z.
 g_{\mu 
u}
     g_{01} = 0.
     g_{02}=0.
     g_{03} = 0.
    g_{11} = \frac{\rho^2 \sqrt{z^2 + \rho^2} - 2mz^2 + \sqrt{z^2 + \rho^2}z^2}{(2m - \sqrt{z^2 + \rho^2})(z^2 + \rho^2)}.
    g_{12}=0.
    g_{13} = 2 \frac{\rho mz}{(2m - \sqrt{z^2 + \rho^2})(z^2 + \rho^2)}.
     g_{20} = 0.
     g_{21}=0.
     g_{23} = 0.
     g_{30}=0.
    g_{31} = 2 \frac{\rho mz}{(2m - \sqrt{z^2 + \rho^2})(z^2 + \rho^2)}.
    g_{33} = \frac{\rho^2 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2} z^2 - 2\rho^2 m}{(2m - \sqrt{z^2 + \rho^2})(z^2 + \rho^2)}.
 \sqrt{-\det(g_{\mu\nu})}
                       -\frac{4\rho^2mz^4+4\rho^6m-4\rho^2m^2(z^2+\rho^2)^{(\frac{3}{2})}+8\rho^4mz^2-\rho^4(z^2+\rho^2)^{(\frac{3}{2})}-\rho^2(z^2+\rho^2)^{(\frac{3}{2})}z^2}{(2m-\sqrt{z^2+\rho^2})^2(z^2+\rho^2)^{(\frac{3}{2})}}.
g^{\mu 
u}
    g^{00} = -\frac{(z^2 + \rho^2)^{(\frac{5}{2})}}{(\rho^4 + 2\rho^2 z^2 + z^4)(2m - \sqrt{z^2 + \rho^2})}.
    g^{01} = 0.
    g^{02} = 0.
g^{03} = 0.
    g^{11} = -\frac{(\rho^2 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2}z^2 - 2\rho^2 m)(z^2 + \rho^2)}{\rho^4 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2}z^4 + 2\rho^2 \sqrt{z^2 + \rho^2}z^2}.
   g^{13} = 2 \frac{\rho m(z^2 + \rho^2)z}{\rho^4 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2}z^4 + 2\rho^2 \sqrt{z^2 + \rho^2}z^2}.
    g^{20} = 0.
    g^{21} = 0.
    g^{23} = 0.
    g^{30} = 0.
   g^{31} = 2 \frac{\rho m(z^2 + \rho^2)z}{\rho^4 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2}z^4 + 2\rho^2 \sqrt{z^2 + \rho^2}z^2}.
    g^{33} = -\frac{(\rho^2 \sqrt{z^2 + \rho^2} - 2mz^2 + \sqrt{z^2 + \rho^2}z^2)(z^2 + \rho^2)}{\rho^4 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2}z^4 + 2\rho^2 \sqrt{z^2 + \rho^2}z^2}.
    \Gamma^0_{00} = 0.
    \Gamma^0_{01} = \frac{1}{2} \frac{\rho \sqrt{z^2 + \rho^2} z^2 - 2\rho m z^2 + \rho^3 \sqrt{z^2 + \rho^2} - \rho (z^2 + \rho^2)^{(\frac{3}{2})} - 2\rho^3 m}{(\rho^4 + 2\rho^2 z^2 + z^4)(2m - \sqrt{z^2 + \rho^2})}.
    \Gamma_{02}^0 = 0.
    \Gamma^{0}_{03} = -\frac{1}{2} \frac{2mz^{3} - \sqrt{z^{2} + \rho^{2}}z^{3} + (z^{2} + \rho^{2})^{(\frac{3}{2})}z + 2\rho^{2}mz - \rho^{2}\sqrt{z^{2} + \rho^{2}}z}{(\rho^{4} + 2\rho^{2}z^{2} + z^{4})(2m - \sqrt{z^{2} + \rho^{2}})}.
    \Gamma^{0}_{10} = \frac{1}{2} \frac{\rho \sqrt{z^2 + \rho^2} z^2 - 2\rho m z^2 + \rho^3 \sqrt{z^2 + \rho^2} - \rho (z^2 + \rho^2)^{(\frac{3}{2})} - 2\rho^3 m}{(\rho^4 + 2\rho^2 z^2 + z^4)(2m - \sqrt{z^2 + \rho^2})}.
    \Gamma^0_{11} = 0.
    \Gamma^0_{12} = 0.
    \Gamma^0_{13} = 0.
    \Gamma^0_{20} = 0.
    \Gamma^0_{21} = 0.
    \Gamma^0_{22} = 0.
    \Gamma^0_{23} = 0.
    \Gamma^0_{30} = -\frac{1}{2} \frac{2mz^3 - \sqrt{z^2 + \rho^2}z^3 + (z^2 + \rho^2)^{(\frac{3}{2})}z + 2\rho^2mz - \rho^2\sqrt{z^2 + \rho^2}z}{(\rho^4 + 2\rho^2z^2 + z^4)(2m - \sqrt{z^2 + \rho^2})}.
    \Gamma^0_{31} = 0.
    \Gamma^0_{32} = 0.
    \Gamma^0_{33} = 0.
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$\Gamma_{00}^1 = \frac{1}{2} \frac{\rho(z)}{z^2}$	$\frac{2+\rho^2)^2-4\rho^3m^2-\rho(z^2+\rho^2)z^2-\rho^3(z^2+\rho^2)+4\rho m\sqrt{z^2+\rho^2}z^2-2\rho m(z^2+\rho^2)^{\left(\frac{3}{2}\right)}-4\rho m^2z^2+4\rho^3m\sqrt{z^2+\rho^2}}{(\rho^2\sqrt{z^2+\rho^2}+\sqrt{z^2+\rho^2}z^2)(z^2+\rho^2)^{\left(\frac{3}{2}\right)}}.$
$\Gamma^1_{01} = 0.$	$(ho^2\sqrt{z^2+ ho^2+\sqrt{z^2+ ho^2z^2}})(z^2+ ho^2)^{(rac{arkpi}{2})}$
$\Gamma^{1}_{02} = 0.$ $\Gamma^{1}_{03} = 0.$	
$\Gamma_{10}^1 = 0.$	$2 + 2 \sqrt{\frac{9}{2}} \cdot 8 + 44 \cdot 13 + 24 + 40 \cdot 7 + 24 \cdot 10 + 9 \cdot 5 + 26 \cdot 2 + 24 \cdot 13 + 24 + 40 \cdot 7 + 24 \cdot 10 + 9 \cdot 2 \cdot 8 + 24 \cdot 13 + 24 \cdot 2 + 24 \cdot 10 \cdot 1$
$\Gamma_{11}^1 = \frac{\rho m(n)}{n}$	$\frac{(2)^{\frac{9}{2}}z^{8} + 44\rho^{13}m^{2}z^{4} + 40\rho^{7}m^{2}z^{10} + 2\rho^{5}m^{2}(z^{2} + \rho^{2})^{\frac{5}{2}}z^{2} - 3\rho^{3}m(z^{2} + \rho^{2})^{\frac{5}{2}}z^{4} - 16\rho^{3}m^{3}(z^{2} + \rho^{2})^{\frac{5}{2}}z^{4} - 2\rho^{3}m^{2}(z^{2} + \rho^{2})^{\frac{5}{2}}z^{4} - 2\rho$
$\Gamma^{1}_{12} = 0.$ $\Gamma^{1}_{13} = \frac{2\rho^{6}n}{2}$	$a^{2}\sqrt{z^{2}+\rho^{2}}z+m(z^{2}+\rho^{2})z^{7}-16\rho^{4}m^{3}z^{3}+2\rho^{2}m^{2}\sqrt{z^{2}+\rho^{2}}z^{5}+\rho^{4}m(z^{2}+\rho^{2})z^{3}+4\rho^{4}m^{2}\sqrt{z^{2}+\rho^{2}}z^{3}-2\rho^{2}m(z^{2}+\rho^{2})^{2}z-\rho^{4}m(z^{2}+\rho^{2})^{2}z-\rho^{4}m(z^{2}+\rho^{2})^{2}z-\rho^{4}m(z^{2}+\rho^{2})^{2}z^{5}+4\rho^{4}m^{2}(z^{2}+\rho^{2})^{2}z^{5}+4\rho^{4}m^{2}(z^{2}+\rho^{2})^{2}z^{5}-8\rho^{6}m^{3}z$
$\Gamma_{13}^1 = \frac{\Gamma_{13}}{\Gamma_{20}} = 0.$	$\frac{n^2\sqrt{z^2+\rho^2}z+m(z^2+\rho^2)z^7-16\rho^4m^3z^3+2\rho^2m^2\sqrt{z^2+\rho^2}z^5+\rho^4m(z^2+\rho^2)z^3+4\rho^4m^2\sqrt{z^2+\rho^2}z^3-2\rho^2m(z^2+\rho^2)^2z^3-2\rho^2m(z^2+\rho^2)^2z^5+4\rho^4m^2(z^2+\rho^2)^2z^2+4\rho^4m^2(z^2+\rho^2)^2z^2+4\rho^4m^2(z^$
$\Gamma^1_{21} = 0.$	
$\Gamma^1_{22} = -\frac{\rho(\rho)}{\rho}$	$rac{ ho^2\sqrt{z^2+ ho^2}+\sqrt{z^2+ ho^2}z^2-2 ho^2m)}{ ho^2\sqrt{z^2+ ho^2}+\sqrt{z^2+ ho^2}z^2}.$
$\Gamma^{1}_{23} = 0.$ $\Gamma^{1}_{30} = 0.$	
$\Gamma_{31}^1 = \frac{2\rho^6 n}{2}$	$\frac{\alpha^2\sqrt{z^2+\rho^2}z+m(z^2+\rho^2)z^7-16\rho^4m^3z^3+2\rho^2m^2\sqrt{z^2+\rho^2}z^5+\rho^4m(z^2+\rho^2)z^3+4\rho^4m^2\sqrt{z^2+\rho^2}z^3-2\rho^2m(z^2+\rho^2)^3z+2\rho^2m(z^2+\rho^2)^3z+2\rho^2m(z^2+\rho^2)^3z-\rho^4m(z^2+\rho^2)^2z-8\rho^2m^3z^5+4\rho^2m^2(z^2+\rho^2)^{(\frac{3}{2})}z+4\rho^2m^2(z^2+\rho^2)^{(\frac{3}{2})}z^3-m(z^2+\rho^2)^2z^5-8\rho^6m^3z}{(2m-\sqrt{z^2+\rho^2})^2(\rho^2\sqrt{z^2+\rho^2}+\rho^2)^2(\rho^2z^2+\rho^$
$\Gamma^1_{32} = 0.$	
$\Gamma^1_{33} = -\frac{12}{3}$	5 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 +
$\Gamma^2 = 0$	
$\Gamma_{00}^2 = 0.$ $\Gamma_{01}^2 = 0.$	
$\Gamma_{02}^2 = 0.$ $\Gamma_{03}^2 = 0.$ $\Gamma_{10}^2 = 0.$	
$\Gamma_{10}^2 = 0.$ $\Gamma_{11}^2 = 0.$	
$\Gamma_{12}^2 = \frac{1}{\rho}.$	
$\Gamma_{13}^2 = 0.$ $\Gamma_{23}^2 = 0$	
$\Gamma_{20}^2 = 0.$ $\Gamma_{21}^2 = \frac{1}{a}.$	
$\Gamma_{22}^2 = 0.$ $\Gamma_{23}^2 = 0.$	
$\Gamma_{23} = 0.$ $\Gamma_{30}^2 = 0.$	
$\Gamma_{31}^2 = 0.$ $\Gamma_{32}^2 = 0.$	
$\Gamma_{33}^2 = 0.$	
$\Gamma_{00}^3 = -\frac{1}{2}\frac{\rho}{2}$	$\frac{2(z^2+\rho^2)z-(z^2+\rho^2)^2z+2m(z^2+\rho^2)^{(\frac{3}{2})}z+4\rho^2m^2z-4\rho^2m\sqrt{z^2+\rho^2}z-4m\sqrt{z^2+\rho^2}z^3+4m^2z^3+(z^2+\rho^2)z^3}{(\rho^2\sqrt{z^2+\rho^2}+\sqrt{z^2+\rho^2}z^2)(z^2+\rho^2)^{(\frac{3}{2})}}.$
$\Gamma_{01}^3 = 0.$	$(ho^2\sqrt{z^2+ ho^2+\sqrt{z^2+ ho^2z^2}})(z^2+ ho^2)^{1/2}$
$\Gamma_{02}^3 = 0.$ $\Gamma_{03}^3 = 0.$	
$\Gamma_{10}^3 = 0.$	$3.68 m \sqrt{z^2 + \rho^2 z^9 + 16 \rho^2 m^2 z^{15} - 16 \rho^4 m^2 (z^2 + \rho^2)^2 z^3 - 16 \rho^6 m^3 (z^2 + \rho^2)^{(\frac{3}{2})} z^7 - 3 \rho^2 m (z^2 + \rho^2)^{(\frac{3}{$
$\Gamma_{11}^3 = -\frac{70}{2}$	$(2m-\sqrt{z^2+\rho^2})^2$
$\Gamma_{12}^3 = 0.$ $\Gamma_{12}^3 = 0.$	$d^2m(z^2 + ho^2)^2z^2 + 16 ho^3m^3z^4 + ho m(z^2 + ho^2)^2z^4 - ho^7m(z^2 + ho^2)z^4 - 4 ho m^3z^6 - 4 ho m^2(z^2 + ho^2)z^2 + 8 ho^5m^3z^2 - 2 ho^5m(z^2 + ho^2)z^2 + 8 ho^5m^3z^2 - 2 ho^5m(z^2 + ho^2)z^2 + 6 ho^5m^2\sqrt{z^2 + ho^2}z^2 + 6 ho^2m^2\sqrt{z^2 + 6 ho^2}z^2 + 6 ho^2m^2z^2 +$
$\Gamma_{13}^3 = -$ $\Gamma_{20}^3 = 0.$	$\frac{(2m(z^2+\rho^2)^2z^2+16\rho^3m^3z^4+\rho m(z^2+\rho^2)^2z^4-\rho^7m(z^2+\rho^2)z^4-4\rho^3m^2\sqrt{z^2+\rho^2}z^4+8\rho m^3z^6-4\rho m^2(z^2+\rho^2)^{\frac{(5)}{2}}z^2+8\rho^5m^3z^2-2\rho^5m(z^2+\rho^2)z^2+\rho^2z^4+\rho^2z^2+\rho^2z^2+\rho^5m(z^2+\rho^2)^{\frac{(5)}{2}}z^2+\rho^2z^2+\rho^$
$\Gamma_{21}^3 = 0.$	
	$rac{ ho^2mz}{\sqrt{z^2+ ho^2}+\sqrt{z^2+ ho^2}z^2}.$
$\Gamma^3_{23} = 0.$ $\Gamma^3_{30} = 0.$	
$\Gamma_{31}^3 = -\frac{2\rho^3}{2}$	$\frac{im(z^2+\rho^2)^2z^2+16\rho^3m^3z^4+\rho m(z^2+\rho^2)^2z^4-\rho^7m(z^2+\rho^2)z^4-\rho^3m(z^2+\rho^2)z^4-4\rho^3m^2\sqrt{z^2+\rho^2}z^4+8\rho m^3z^6-4\rho m^2(z^2+\rho^2)^{(\frac{5}{2})}z^2+8\rho^5m^3z^2-2\rho^5m(z^2+\rho^2)z^2-4\rho m^2(z^2+\rho^2)^{(\frac{3}{2})}z^4-2\rho^5m^2\sqrt{z^2+\rho^2}z^2+\rho^5m(z^2+\rho^2)^2-4\rho^3m^2(z^2+\rho^2)^{(\frac{3}{2})}z^2}{(2m-\sqrt{z^2+\rho^2})^2(\rho^2\sqrt{z^2+\rho^2}z^2+\rho^2)^2(\rho^2\sqrt{z^2+\rho^2}z^2+\rho^2)^2(z^2+\rho^2)^2}.$
$\Gamma_{32}^3 = 0.$	
$\Gamma_{33}^3 = \frac{8\rho^2 n}{2}$	$\frac{a^{2}z^{15} + 16\rho^{6}m^{3}(z^{2} + \rho^{2})^{(\frac{7}{2})}z^{3} + \rho^{2}m(z^{2} + \rho^{2})^{(\frac{13}{2})}z^{7} - 3\rho^{2}m(z^{2} + \rho^{2})^{(\frac{13}{2})}z^{7} - 3\rho^{2}m(z^{2} + \rho^{2})^{(\frac{13}{2})}z^{7} - 3\rho^{2}m(z^{2} + \rho^{2})^{(\frac{13}{2})}z^{7} - 3\rho^{4}m(z^{2} + \rho^{2})^{(\frac{13}{2})}z^{7} - 3\rho^{$
$oxed{R_{\mu u}}$	
	$5471\rho^{32}m(z^{2}+\rho^{2})^{14}z^{16}+276\rho^{2}m(z^{2}+\rho^{2})^{14}z^{16}+276\rho^{2}m(z^{2}+\rho^{2})^{14}z^{26}+21252\rho^{40}m(z^{2}+\rho^{2})^{14}z^{26}+21252\rho^{40}m^{3}($
$R_{01} = 0.$	
$R_{02} = 0.$ $R_{03} = 0.$	
$R_{10} = 0.$	$3240 \rho^{46} m(z^2 + \rho^2)^{264} z^{10} + 5015206350 \rho^{36} m(z^2 + \rho^2)^{255} z^{38} + 192565800 \rho^{48} m(z^2 + \rho^2)^{255} z^{26} - 15519504 \rho^{24} m^3 (z^2 + \rho^2)^{$
	m(z+p) z $+ 3019200900p$ $m(z+p)$ z $+ 101200p$ $m(z+p)$ z $+ 1012000p$ $m(z+p)$ z $+ 101200p$ $m(z+p)$ z $+ 1012000p$ $m(z+p)$ z $+ 101200p$ $m(z+p)$ z $+ 1012000p$ $m(z+p)$
$R_{12} = 0.$ $R_{13} = 0.$	
$R_{20} = 0.$ $R_{21} = 0.$	
$R_{22} = 0.$ $R_{23} = 0.$	
$R_{30} = 0.$ $R_{31} = 0.$	
$R_{32} = 0.$	$4540 \rho^{18} m(z^2 + \rho^2)^{317} z^{16} - 320320 \rho^{12} m^3 (z^2 + \rho^2)^{317} z^{16} - 320320 \rho^{12} m^3 (z^2 + \rho^2)^{312} z^{20} - 721080360 \rho^{22} m^3 (z^2 + \rho^2)^{312} z^{20} - 13564980 \rho^{16} m^5 (z^2 + \rho^2)^{312} z^{20} - 13564980 \rho^{16} m^5 (z^2 + \rho^2)^{312} z^{20} + 1536 \rho^{1$
$R_{33} = -\frac{25}{}$	$m(z + p) = z^{-1} + 1000 + m(z + p) = z^{-1} +$

$R^{\mu}_{\ u}$																							
$R^{0}_{\ 0} = R^{0}_{\ 1} =$	0. 0.																						
$R_{2}^{0} = R_{3}^{0} =$	0. 0.																						
$R_{0}^{1} =$	0.	,2,,,34,,27, ,16	₀ 4 _m 3 _x 24		a20m19m19m14	,32 _m ,3		.20123_3218 .16	m3 ≈4		.1434243485	56 _{am a} 18	o ⁶ m³ o	~38 ~12 ~3 ~22 ~6 ~3 ~2	2	.141	231.630		₀ 20 ₀ 0	?Pzħ ³ z} ²⁴ mz ⁸ WY VXZK/#ZPHzYKZZ)(12772} ¹ 22) ^{2:}		2 m63 m3214	m ~ 10
$\frac{\rho}{(2p^2)^4(p^2\sqrt{p^2})^{25}\rho^2}$	$128328 \over z^2 (2m^2x^2)(z^2/{\pm^2 ho^2})^{2\over ho}$	$\frac{1}{2}$ $\frac{4992}{\sqrt{2}}$ $\frac{1}{\sqrt{2}}$ $\frac{4992}{\sqrt{2}}$ $\frac{1}{\sqrt{2}}$	$\frac{\rho m^2 + 4462688}{2 \rho^2 \rho^2 \rho^2 \rho^2 \rho^2} + 4462688$	80 201(24))(\$\frac{2}{2}\frac{1}{2}\frac{3}{	2/16 ² 0 ² \16 ² \16 ² 0 ² \	$\frac{\rho}{\sqrt{z^2(\pm^2\rho^2)}} \frac{148446616}{\sqrt{z^2 + \rho^2}} \sqrt{z^2 + \rho^2} z^2$	$\frac{144}{(2m+\sqrt{p_{z}^{2})^{\frac{1}{2}}}z^{\frac{1}{2}}+p^{2})^{\frac{2}{2}}}(p_{z}^{2})^{\frac{1}{2}}$	$\frac{p}{2z\sqrt{\mu^2\rho^2+\sqrt{2}\sqrt{2}}}\frac{p}{\sqrt{2}\sqrt{2}}\frac{p}{\sqrt{2}\sqrt{2}\sqrt{2}}\frac{p}{\sqrt{2}}\frac{p}{\sqrt{2}\sqrt{2}}\frac{p}{\sqrt{2}}$	$\frac{m^2z}{\sqrt{2^2+\rho^2}} + \frac{35294697560}{\sqrt{2^2+\rho^2}} + \frac{35294697560}{\sqrt{2^2+\rho^2}}$	$\frac{33622600}{-\rho^2 \sqrt{2}n^2 + \rho^2 x^2} + \rho^2 x^2 + \rho^2 x^$	1	$\frac{mz}{\sqrt{4} + 20} \sqrt{x^2} \sqrt{x^2} \sqrt{x^2}$	$770496 + 120 \rho m^2 z$ $4z^2 + \sqrt{\rho^2} \frac{35}{\rho^2} \rho^2 \sqrt{(\beta^2 2/\rho^2)^4 + \rho^2}$	2 /272 102 2	$\frac{+72382733960}{(z^2+\rho^2)^{26}}(z^2+\rho^2)^{26}$	$\frac{112}{m} - \sqrt{(2^2 + p^2)^4} \sqrt{(2^2 + 2^2)^4}$	$\frac{mz}{1} \frac{z}{\rho \rho \beta^2} + \sqrt{z^2 z^2 + \rho \beta^2 \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2 + \rho \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2 + \rho \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2 + \rho \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2 + \rho \beta^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2 + \rho \beta^2 z^2}} \sqrt{z^2 z^2}} \sqrt{z^2 z^2}} \sqrt{z^2 z^2} \sqrt{z^2 z^2}} \sqrt{z^2 z^2}} \sqrt{z^2 z^2}} \sqrt{z^2 z^2} \sqrt{z^2}} \sqrt{z^2}}$	70248340 - 1368 $(z^2++\rho^2)^{1/8}(z^2+\rho^2)(2m(2m\sqrt{2})^{1/8})$	$\frac{\beta}{z(2\pi^2p^2)}\sqrt{p^2+p^2}$	n <i>an zp mz</i> hp wx4z*/n2p4z})(z2)(z3)2}\ j2) ²	$403240 + 59514 + ho^2)(2)(2m\sqrt{\sqrt{2m\rho^2}})$	1	#2017 p7 (23)(±
$R_{2}^{1} = R_{3}^{1} =$	0. 0.																						
$R_{0}^{2} = R_{0}^{2} = R_{0}^{2}$	0.																						
$R_{0}^{2} = R_{1}^{2} = R_{2}^{2} = R_{3}^{2} = R_{3}^{2} =$	0.																						
$R_3^2 = R_0^3 =$	0. 0.																						
$R_{1}^{3} = R_{2}^{3} =$	0. 0.																						
$R_{2}^{3} = \frac{\rho^{5}}{R_{3}^{3}}$	$\rho^{6}mz^{18}$ $\rho^{4}m^{5}z^{18}$ $\rho^{4}m^{5}z^{18}$	$\rho^{30}mz^2 + 12$	$\frac{\rho^{12}mz^4}{111969}$	$g_8^{18}mz^{14}$ $\rho^{34}mz^{14}$	$\frac{nz^2}{x^4+2240}$ $\frac{1726}{x^3+2240}$	$\frac{1}{2}m^3z^{28}$ $\rho^{18}m^5z^4$ $\frac{1}{3}24$	$\frac{\rho^{36}}{1111975} = 60 = \frac{\rho^{36}}{1111975}$	$mz^{28} z^{30} + 403$	ρ^{16303}	$\frac{x_z^{56}}{44}$ 320 $\frac{x_z^{737}}{44}$ 320	$\rho^{26} p ^{16} m^3 z^2$	$\frac{6}{290}$	$\rho p^{264} m^{33.1466}$	<u>34</u> 68 5 44 2 55	$\rho^{26} \rho^{44} x n^{12} z^{20}$	$\frac{m^3z^{72}\rho^{10}}{\sqrt{2z^{3}+4z^{4}}}$	$\frac{0}{2}mz^{64} + \frac{593}{2}90966$	$\rho_p^{2^{64}} n n^{4} z^{30}$		$\frac{\rho^{16} p_{1}^{46} z_{1}^{46} z^{16}}{(2m(2m\sqrt{z\sqrt[3]{z^{2}\rho^{2}})^{\frac{4}{\rho^{2}}}})^{\frac{4}{\rho^{2}}} (z^{2}\rho^{2})^{\frac{63}{\rho^{2}}})^{(\frac{63}{\rho^{2}})^{\frac{63}{\rho^{2}}}}}$	ρm	$\frac{33186}{2}$ $\frac{3186}{2}$ $\frac{3186}{2}$ $\frac{3186}{2}$	20
$(2m - \sqrt{z^2} +$	ρ^2) $(2m + \rho^2)(z^2 + \rho^2)$	$(2\hbar \mu + \rho \zeta) z^2 + \rho^2) (2\hbar \mu + \rho^2)$	$-\rho \langle (z^2 + \rho^2) (z^2 + 2m) \rangle^2$	$\sqrt{z^2 + (2\pi)n} \left(z^2\sqrt{ z ^2}\right)^2$	$(z^2 + \rho t^2)m^2 - \sqrt{z^2}$	$-(27)n \left(z\sqrt{+zp^2}\right)^2 p^2 $ $(z^2 +$	$-\rho^2)^{2}(2m-(2m^2+\sqrt{\mu})^2)$	$(\alpha^2) + (\alpha^2) + (\alpha^2) + (\beta^2)^{2}$	$(22m - \sqrt{z^2 + \rho p^2})$	$((\dot{z}^{2}+\rho\dot{p}^{2})^{2})^{2}$	$(2m(2m)z^2 + z^2) + (z^2) + $	$\mathcal{P}^2 + \mathcal{P}^2$	$22m-\sqrt{z^2++ hoeta^2})(z^2++ hoeta^2)^2$	$(2\hbar 2m \sqrt{3}$	\$\frac{1}{2}\text{\text{\text{\$\exititw{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\texit{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\texi\}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	$(2m - \sqrt{2nt} + p^2)^2 (*$	$(2\rho^2)\rho^2$ (2)	$(2h2m \sqrt{x^2z^2} + h^2)^2(z^2z^2)$	p2 p23 ⁰²	$(2m(2m\sqrt{z}\sqrt{z^2/z^2})^4)\rho^2)^4$	$(2m-\sqrt{z^2}+\mu$	$(z^2 + \rho^2)^{(2)}$	$(2\hbar 2m \sqrt{s})$
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$G_{2}^{2} =$	0.																						
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$g^{\mu u}\Gamma^{\lambda}_{\mu u}$	= 0?																						
$g^{\mu u}\Gamma^0_\mu$	$_{\nu}=0.$																						
$g^{\mu u}\Gamma^1_\mu$	$\nu = 20 \frac{\rho^7 m^2}{(2m - \sqrt{z^2 + \rho^2})}$	$\frac{z^6}{(2m-1)^3(z^2+\rho^2)^6} - 396\frac{1}{(2m-1)^6}$	$\frac{\rho^{15}mz^{10}}{-\sqrt{z^2+\rho^2}} (z^2+\rho^2)^{12}$	$r - 9496200 \frac{\rho}{(2m - \sqrt{z^2})^2}$	$\frac{2^{29}m^2z^{18}}{+\rho^2)^3(z^2+\rho^2)^{(\frac{43}{2})}} -$	$18240 \frac{\rho^{11} m^4 z}{\left(2m - \sqrt{z^2 + \rho^2}\right)^3}$	$z^{34} = 384 - 3$	$\frac{\rho^{15}m^3z^8}{m-\sqrt{z^2+\rho^2})^3(z^2+\rho^2)}$	$\left(\frac{1}{(2m-\sqrt{z})^{12}}\right)^{12} = 34440$	$\frac{\rho^{41}m^2z^6}{(z^2+\rho^2)^3(z^2+\rho^2)^{(\frac{43}{2})}}$	$\frac{\rho^9 m^3 z}{(2m - \sqrt{z^2 + \rho^2})}$	$\left(\frac{z^{10}}{z^{3}}\right)^{3}\left(z^{2}+\rho^{2}\right)^{10}+110$	$\frac{\rho^{19}mz^6}{2m - \sqrt{z^2 + \rho^2}} (z^2 + \rho^2)^{12}$	$\frac{\rho^3 mz^2}{(2m - \sqrt{z^2 + \rho^2})}$	$\frac{z^2}{(2)^3(z^2+\rho^2)^2} + 56\frac{1}{(2m-1)^2}$	$\frac{\rho^{11}mz^8}{-\sqrt{z^2+\rho^2})^3(z^2+\rho^2)^9}$	$+2\frac{\rho^{25}m}{(2m-\sqrt{z^2+\rho^2})^3}$	$\frac{1}{(z^2+\rho^2)^{12}} - 96\frac{1}{(2m-\sqrt{z})^{12}}$	$\frac{\rho m^5 z^6}{(2+\rho^2)^3 (z^2+\rho^2)^5} - \frac{1}{(2+\rho^2)^5} = \frac{1}{(2+$	$+16\frac{\rho m^5 z^4}{(2m-\sqrt{z^2+\rho^2})^3 (z^2+\rho^2)}$	$\frac{1}{4} + 8 \frac{\rho^3 m z^1}{(2m - \sqrt{z^2 + \rho^2})}$	$\frac{16}{(2m)^3(z^2+\rho^2)^9} + 336\frac{1}{(2m)^3}$	$\frac{\rho^9 m}{n - \sqrt{z^2 + 1}}$
$g^{\mu\nu} \Gamma^2_{\mu}$	$_{\nu} = 0.$																						
$g^{\mu u}\Gamma^3_\mu$	$_{\nu} = 24 \frac{1}{(2m - \sqrt{z^2 + \rho^2})}$	$\frac{\rho^* m^3 z^{z^*}}{(2)^3 (\rho^2 \sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2})}$	$\frac{1}{(\rho^2 z^2)(z^2 + \rho^2)^{(\frac{25}{2})}} + 96$	$\frac{1}{(2m-\sqrt{z^2+\rho^2})^3(\rho^2\sqrt{z^2+\rho^2})^3}$	$\frac{\rho^2 m^2 z^{22}}{\sqrt{z^2 + \rho^2} + \sqrt{z^2 + \rho^2} z^{22}}$	$\frac{1}{(2x^2+o^2)^{11}} - 11440 \frac{1}{(2x^2+o^2)^{11}}$	$\frac{1}{m-\sqrt{z^2+\rho^2}}$ $\frac{3}{(\rho^2\sqrt{z})^3}$	$\frac{\rho^2 m^2 z^{22}}{r^2 + \rho^2} + \sqrt{z^2 + \rho^2} z^2$	$\frac{1}{z^2 + \rho^2)^{(\frac{25}{2})}} - 5742 \frac{1}{(2m)^2}$	$(-\sqrt{z^2+\rho^2})^3(\rho^2\sqrt{z^2+\rho^2})^3$	$\rho^{-1}m^{-}z^{-1}$ $(z^{2}+\rho^{2}+\sqrt{z^{2}+\rho^{2}}z^{2})(z^{2}+\rho^{2}z^{2})$	$(2 + \rho^2)^{12} - 48 \frac{1}{(2m - \rho^2)^{12}}$	$\frac{\rho^{\circ}m^{2}z^{\circ}}{(2\sqrt{z^{2}+\rho^{2}})^{3}(\rho^{2}\sqrt{z^{2}+\rho^{2}}+\rho^{2})}$	$\sqrt{z^2 + a^2}z^2$) $(z^2 + a^2)$	$\frac{1}{(2m-\sqrt{z^2+1})^3}$	$\frac{\rho^{2}m^{3}z^{23}}{(\rho^{2}\sqrt{z^{2}+\rho^{2}}+\sqrt{z^{2}})}$	$(z^2 + \rho^2 z^2)(z^2 + \rho^2)^{(\frac{25}{2})}$	$-4576{(2m-\sqrt{z^2+\rho^2})^3}$	$\frac{\rho^{\circ}m^{\circ}z^{z_1}}{\rho^2\sqrt{z^2+\rho^2}+\sqrt{z^2}}$	$\frac{1}{1+\rho^2 z^2(z^2+\rho^2)^{(\frac{25}{2})}} - 112 \frac{1}{(2m)^2}$	$\frac{\rho^2}{-\sqrt{z^2+\rho^2}}$	$\frac{-m^2z^{-1}}{+\rho^2+\sqrt{z^2+\rho^2}z^2}$	$\frac{1}{(2+a^2)^{11}}$