Solutions of the Genralities for the Plane Wave in the Symmetrical Space Time of Four Dimension

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Abstract: *For the plane wave* $\left(\frac{\sqrt{t_1^2 + t_2^2}}{z} \right)$ *we obtain the solutions of the generalities $R_{ij} = 0$ by taking the symmetrical space time as*

$$ds^2 = -Ady^2 - \emptyset_2^2 B dz^2 + \emptyset_3^2 2B dt_1^2 + 2B t_2^2$$

and the solutions are as

$$P = \frac{1}{2}\left(\frac{\bar{M}}{M} - \frac{\overline{M^2}}{2M} - \frac{\overline{M\,B}}{M\,B} \right) - \frac{1}{2}\left(\frac{\bar{B}}{B} - \frac{3\overline{B^2}}{2B^2} \right).$$

By calculating the curvature tensor & Ricci tensor the similar solution is obtained

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