

Killing-Yano tensors of order two and three for a class of generalized pp-wave metrics

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Abstract

Killing-Yano tensors of order two and three and their corresponding Killing tensors are found for a sub-class of metrics admitting parallel null 1-planes. These metrics include a possible generalization of the pp-wave metric and the Siklos metric which is conformal to it. Radiative properties of those metrics are also investigated within this context.