ON IRREDUCIBLE PARTIALS OF THE RICCI TENSOR TRACELESS PART IN A FINITE SPACE-TIME REGION IN GENERAL RELATIVITY

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S u m m a r y

The Riemann tensor irreducible part $E_{iklm} = \frac{1}{2}(g_{il}S_{km} + g_{km}S_{il} - g_{im}S_{kl} - g_{kl}S_{im})$ constructed from the metric tensor g_{ik} and traceless part of the Ricci tensor $S_{ik} = R_{ik} - \frac{1}{4}g_{ik}R$ is expanded into bilinear combinations of bivectorial fields being eigenfunctions of E. Field equations for the bivectors induced by Bianchi identities are studied, and it is shown that, in general case, it will be the 3-parametric local symmetry group of a Yang—Mills field.