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Timelike and Spacelike Ricci Collineation Vectors in String Fluid

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Abstract: We study the consequences of the existence of timelike and spacelike Ricci collineation vectors (RCVs) for string fluid in the context of general relativity. Necessary and sufficient conditions are derived for a space-time with string fluid to admit a timelike RCV, parallel to u^a, and a spacelike RCV, parallel to n^a. In these cases, some results obtained are discussed.

Key Words: Ricci Collineation, String, String Fluid