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Two-Flux Colliding Plane Waves in String Theory

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Abstract: We construct the two-flux colliding plane wave solutions in higher-dimensional gravity theory with dilaton, and two complementary fluxes. Two kinds of solutions have been obtained: Bell-Szekeres (BS) type and homogeneous type. After imposing the junction condition, we find that only the BS type solution is physically well-defined. Furthermore, we show that the future curvature singularity is always developed for our solutions.

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Key words: colliding plane wave, string theory

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