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Deflection of ultrarelativistic massive particles in Schwarzschild space-time

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Gravitational fields curve space-time about them, modifying massive and non-massive particle trayectories. In this work the deflection angle we study the deflection angle generated by the change in the trayecoties affected by the gravitational field of a Schwarzschild space-time. We present an exact analytic formula for small angles and a useful relation for numerical computations. Different applications, in particular to ultra-relativistic neutrinos are presented.

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