

Normal Trajectories in Stationary Spacetimes under the Action of an External Field with Quadratic Asymptotic Behavior*

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Abstract: The aim of this note is to study the existence of normal trajectories joining two given submanifolds under the action of an external field in a standard stationary spacetime. Here, it is assumed that both the growth of the potential and that one of the coefficients of the metric are critical in a suitable sense.

Key words: Standard stationary spacetime, normal trajectory, external field, quadratic growth, variational approach.

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