

**ON A CERTAIN TWO-POINT BOUNDARY VALUE PROBLEM
ON A LORENTZ MANIFOLD, CONNECTED TO REFERENCE
FRAMES BY A. POLTORAK**

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In the concept, suggested by A. Poltorak, the reference frame in General Relativity is a certain manifold equipped with a connection. In the paper the following question is considered: is it possible to connect two events in the space-time by a time-like geodesic if they are connected by a geodesic in the reference frame that has a time-like initial tangent vector? This question is interpreted as follows: does an event belong to the proper future of another event in the space-time if this is valid in the reference frame? For reference frames of two special types some geometric conditions are found under which such a geodesic does exist.