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Conservation laws in embedding theory OSCAR MURILLO, ALEXANDER MUSTAFAEV, National Mineral Resources University (Mining University) — In this work is considered embedding theory, a theory in which independent variables which describe gravity are functions of the space-time embedding into a ten-dimensional pseudo-Euclidean space. Neother's theorem is used to find conservation laws for energy and angular momentum as a result from the action's invariance in relation to the rotation and translation of the system. The form of these conservation laws and their consequences depending on the different formulations of embedding theory is discussed. It is also analyzed a transition from embedding theory to a field theory in a flat space-time with a number of dimensions greater than four. The same procedure is followed in this case to find conservation laws, resulting in the solution of the problem of time present in Einstein's theory of general relativity.

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