

INTEGRABLE COSMOLOGICAL
MODELS IN THE EINSTEIN — CARTAN
THEORY WITH TWO SOURCES OF TORSION

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S u m m a r y

In the framework of the two-torsion Einstein–Cartan theory (ECT), spatially flat cosmological models with a nonminimally coupled scalar field, perfect fluid, and stiff one are considered. Exact partial solutions for the above models are obtained for an arbitrary coupling constant. It is shown that both singular and nonsingular models are possible depending on the type of scalar field. For the obtained solutions, some restrictions on the coupling constant are found, and the case of two sources of torsion is discussed.