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Closed timelike loops in homogeneous rotating Λ-dust cosmologies DAVID LINDSAY, None — We analyze what we believe to be all known homogeneous rotating Λ-dust cosmologies, to see if they contain closed timelike loops (CTLs). We investigate only these exact GR solutions because they appear to most closely resemble our own universe (apart from rotation). These solutions are all somewhat similar to the Gödel solution, which is known to contain CTLs. Of the solutions discussed, it turns out that exactly those with $\Lambda < 0$ possess CTLs. The paper argues that many more homogeneous rotating Λ-dust solutions likely exist, but have not yet been found.

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None

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