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4MOST-Rubin few-hundred-megaparsec Hubble-Lemaitre analysis with minimal model dependence

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The goal of this Hubble-Lemaitre flow analysis is to measure the cosmological line element with as few prior model assumptions as possible. The aim will be to use 4MOST followups of LSST-Rubin supernovae type Ia (SNe Ia) light curve analyses together with complementary surveys to infer cosmological parameters for the local few
hundred megaparsecs of our Universe with as little dependence on model parameters as possible. This approach aims to make no cosmological assumptions beyond the assumption that the Universe is a 4-Lorentzian pseudo-Riemannian manifold satisfying the Einstein equation everywhere. This is a less restrictive hypothesis than modelling via the usual Friedmann-Lemaitre-Robertson-Walker (FLRW) line element.

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