Abstract Submitted for the APR09 Meeting of The American Physical Society

Quasilocal Energy of FRW Universe MARCUS AFSHAR, University of California - Davis — The quasilocal energy of an arbitrary FRW model of the universe is calculated. The results have the correct behavior in the small-sphere limit. Higher order corrections are found when comparing these results to classical calculations of cosmological energy. This example is unique in that it involves a non-stationary spacetime. As previous definitions are inadequate, a more precise definition of quasilocal energy is provided to accommodate non-stationary spacetimes.

Marcus Afshar University of California - Davis

Date submitted: 07 Jan 2009

Electronic form version 1.4