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Cosmic Mechanics CHARLES H. ROSS, Academy at UAH — Cosmic Mechanics is the first complete cosmology derived specifically for an expanding universe. It provides insights into the origin, composition, expansion, geometry, and structure of the universe. It is based on the premise that the laws of nature are universal, non-varying, and mechanically obeyed. CMB analyses indicate that time, motion, and energy are absolute. Cosmic energy analysis indicates that the universe started with zero total energy and still has it, i.e. the sum of the universes total energy (radiation, kinetic, and gravitational debt) has always been precisely zero. The presumption of zero total energy allows the CMB temperature to be computed to within 0.1°K of COBEs measured value. It also results in zero curvature in four-dimensions (flat-4D). The parameter-free energy propagation models computed using flat-4D geometry directly (1) predict the CMBs extreme isotropy, (2) predict the age of the universe at 15.03 Gyr in agreement with the 14.0 Gyr age of the oldest known globular clusters, and (3) allow the derivation of simple trend and dispersion models that precisely match Reisss 2004 consolidated supernovae dataset and WMAPs CMB anisotropy dataset.

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