

Models for disk galaxy formation

Ortwin Gerhard, University of Basle, Switzerland

Abstract I describe multiphase models for the formation and evolution of disk galaxies within a growing dark halo whose mass evolves according to LCDM cosmological simulations. These models predict the star formation history, the photometric and metallicity evolution over redshift, and the distribution of stellar ages and metallicities at $z=0$. Some comparisons with observations of young galaxies and stellar components in the Milky Way are discussed.