

Astro 105 Exam III Study Guide

Topics (not exhaustive, but covers the most important material)

Age of universe (and some of the details)

Alan Guth

Big Bang Theory

Big Crunch

Blazars

Clusters, Superclusters

Cosmic Microwave Background Radiation (CMBR)

Cosmological Constant

Cosmological Redshift

Cosmology

Dark energy

Dark matter

Doppler Redshift

Edwin Hubble

Electromagnetic force

Electroweak Theory, Steven Weinberg

Four fundamental forces

Galactic collisions

Gamma-Ray Bursts

General Relativity (GR) theory, equation, and terms

Gravity force

High Energy Physics, Length Scales

Hubble flow

Hubble's Constant and Law

Inflation

Lawrence Krauss

Local Group

Matter-dominated and Radiation-dominated universe

Quasars

Quintessence

Recessional velocity

Richard Feynman, Feynman Diagrams

Special Relativity's Constraint on Fluctuating Objects

Strong force

Superstrings and Brane Theory

Tully & Fisher's relation and law

Vacuum energy

Weak force