Astro 105 Summer 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 **B**lazars **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