

Astro 105 Exam II Study Guide

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

Chandrasekhar Limit
Dark matter
Dwarf stars (red, white, brown)
Edwin Hubble
Galaxies
Galaxy shapes (spiral, barred, etc.)
Giant and Supergiant stars
Globular clusters
Interstellar medium (know details)
Interstellar reddening
Milky Way (sizes, number of stars, etc.)
Neutron stars (data, size limits, formation, etc.)
No-Hair theorem
Nova
Nuclear bulge (center)
Pauli Exclusion Principle
Physics of falling into a black hole
Post-Main-Sequence events (shell fusion, flashes, etc.)
Postulates of Special and General Relativity
Protostars, Pre-Main-Sequence stars, Main-Sequence stars
Pulsars
Recombination photons
Relativity
Roche Limit
Rotation curves (Keplerian, solid-body, etc.)
Roy Kerr
Schwarzschild's contributions
Shell fusion reactions and products
Spin-Flip radiation of hydrogen
Star characterizations based on masses
Star formation mechanism
Stellar lifetimes
Stephen Hawking
Supernova (Type II and Type Ia)
Superstrings
Synchrotron radiation
Temperatures for fusion reactions
Variable stars
Worm holes
X-Ray Bursters