

Bibliography for the Astrophysics and Cosmology Course

October 28, 2003

1 Astrophysics

The following books are reserved at the Library and cover the material of the course (to a greater or lesser extent)

- *Astrophysics I*, Bowers & Deeming. [Good book covers the material at a good level].
- *Physics of Stellar Evolution and Cosmology*, Goldberg & Scardon. [Good coverage at a comparable level].
- *The Physical Universe, An introduction to Astronomy*, Shu. [Gives a wide coverage of Astrophysics and Cosmology, but at a low level compared with our course].
- *Principles of Stellar Evolution and Nucleosynthesis*, Clayton. [Covers the material of the course and much more, including a lot of technical detail].
- *Stellar Structure*, Cox. [Similar to Clayton in coverage and level].

2 Cosmology

Popular and Nontechnical:

- Weinberg, *The First Three Minutes*, [an old classic popular]
- Silk, *The Big Bang* [non-technical main part, with mathematical notes at the end, includes formation of structure]
- Silk, *A Short History of the Universe* [popular with nice pictures and modern issues discussed]
- Guth *The Inflationary Universe* [nontechnical, focus on the early universe]
- Rees *Before the Beginning* [modern, with focus on the early universe]

Technical:

- Kolb & Turner, *The Early Universe* [technical, graduate]
- Padmanabhan, *Structure Formation in the Universe* [graduate, technical, basic text, pedagogical and organized]
- Coles & Lucchin, *Cosmology* [high-undergraduate and graduate, technical, basic text]
- Peacock, *Cosmological Physics* [high-undergraduate and graduate, technical, basic text]