

## **Textbooks on Stellar Structure and Evolution:**

- \* Principles of Stellar Evolution and Nucleosynthesis, by D. Clayton (1983)
- \* Supernovae and Nucleosynthesis, by D. Arnett, Princeton University Press, 1996.
- \* An Introduction to the Theory of Stellar Structure and Evolution, by D. Prialnik, CUP 2000.
- \* Stellar Interiors: Physical Principles, Structure, and Evolution, by Hansen, C.J., Kawaler, S.D., and Trimble, V., Springer-Verlag 1994.
- \* Stellar Structure and Evolution, by Kippenhahn, R. and Weigert, A., Springer-Verlag 1990.
- \* Structure and Evolution of the Stars, by Schwarzschild, M., Dover paperback 1965; first published 1958.
- \* An Introduction to the Study of Stellar Structure, by S. Chandrasekar, Dover (1960).
- \* Internal Constitution of the Stars, by Eddington, A.S., Dover paperback 1950; first published 1926; re-issued by CUP in 1988.
- \* Introduction to Stellar Astrophysics (3 volumes), by E. Boehm Vitense, i.e.: Vol. 1. Basic Stellar Observations, and Vol. 3. Stellar Structure and Evolution, CUP 1989, 1992.

## **Undergraduate Texts:**

- Introduction to Astrophysics, by Carroll and Ostlie (1999)
- The Physical Universe, by F. Shu (1982)
- Introductory Astronomy and Astrophysics, Zeilik and Gregory (1998)

## **Other Texts:**

- Advanced Stellar Astrophysics, by Rose (1998)
- Introduction to Stellar Atmospheres and Interiors, by Novotny (1973)
- Astrophysics v1: Stars, by Bowers and Deeming (1984)
- The Stars: their Structure and Evolution, by R.J. Tayler
- Fundamentals of Radiation Hydrodynamics, by D. Mihalas and B. Mihalas (1984)
- Stellar Atmospheres, by D. Mihalas (1978)
- Fundamental Astronomy, by Karttunen, H. et al., Springer Verlag, 1993 (2nd Ed.)

## **Texts on Related Material:**

- Shapiro, S. L., and Teukolsky, S. A.: “Black Holes, White Dwarfs and Neutron Stars” .
- Cox, J. P., and Giuli, R. Th.: “Principles of Stellar Structure” (two volumes) .
- Aller, L. H., and McLaughlin, D. B. (editors) : “Stellar Structure”, Volume VIII of “Stars and Stellar Systems” .
- Cox, J. P.: “Theory of Stellar Pulsations” .
- Tassoul, J. L.: “Theory of Rotating Stars” .
- Kittel, Ch., and Kroemer, H.: “Thermal Physics” .

## **Review articles in Annual Review of Astronomy and Astrophysics:**

### **Stellar Evolution:**

- Shu, F. H., Adams, F. C., and Lizano, S. 1987, **25** , 23: “Star Formation in Molecular Clouds: Observation and Theory” .
- Iben, I. Jr. 1967, **5** , 571: “Stellar Evolution Within and Off the Main Sequence” .
- Iben, Icko, Jr. 1974, **12** , 215: “Post Main Sequence Evolution of Single Stars” .
- Iben, I. Jr., and Renzini, A. 1983, **21** , 271: “Asymptotic Giant Branch Evolution and Beyond” .
- Chiosi, C., and Maeder, A. 1986, **24** , 329: “The Evolution of Massive Stars with Mass Loss” .
- Wagoner, R. V. 1969, **7** , 553: “Physics of Massive Objects” .

### **Mass Loss from Stars:**

- Casinelli, J. P. 1979, **17** , 275: “Stellar Winds” .
- Dupree, A. K. 1986, **24** , 377: “Mass Loss from Cool Stars” .
- Zuckerman, B. 1980, **18** , 263: “Envelopes Around Late-Type Giant Stars” .
- Conti, P. S. 1978, **16** , 371: “Mass Loss in Early-Type Stars” .
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### **Final Products of Stellar Evolution:**

- Kaler, J. B. 1985, **23** , 89: “Planetary Nebulae and Their Central Stars” .
- Liebert, J. 1980, **18** , 363: “White Dwarf Stars” .
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- Baym, G., and Pethick, C. 1979, **17** , 415: “Physics of Neutron Stars” .
- Joss, P.C., and Rappaport, S. A. 1984, **22** , 537: “Neutron Stars in Interacting Binary Systems” .
- Taylor, J. H., and Stinebring, D. R. 1986, **24** , 285: “Recent Progress in the Understanding of Pulsars” .

### **Binary Stars, Observations and Theory:**

- Abt, H. A. 1981, **21** , 343: “Normal and Abnormal Binary Frequency”.
- Paczynski, B. 1971, **9** , 183: “Evolutionary Processes in Close Binary Systems”.
- Thomas, H. C. 1977, **15** , 127: “Consequences of Mass Transfer in Close Binary Systems”.
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- Robinson, E. L. 1976, **14** , 119: “The Structure of Cataclysmic Variables”.
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### **Stellar Atmospheres:**

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- Tsuji, T. 1986, **24** , 89: “Molecules in Stars”.
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### **Stellar Instabilities:**

- Christy, R. F. 1966, **4** , 353: “Pulsation Theory”.
- Hansen, C. J. 1978, **16** , 15: “Secular Stability: Applications to Stellar Structure and Evolution”.
- Cox, A. N. 1980, **18** , 15: “The Masses of Cepheids”.
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### **Fundamental Data:**

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**The faintest white dwarfs:**

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**Radioactive elements:**

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