

Chapter 21. Stellar Structure: What Makes a Star Run?

Note. The most important factor in determining a stars evolution is its mass. A star near the top of the main sequence may have a mass 50 times the Sun's mass but it then burns it fuel faster and may "live" only a few million years. On the other hand, an M star with 1/20 of the Sun's mass may "live" 5×10^{12} years. In fact, the majority of stars in the universe are low-mass stars.

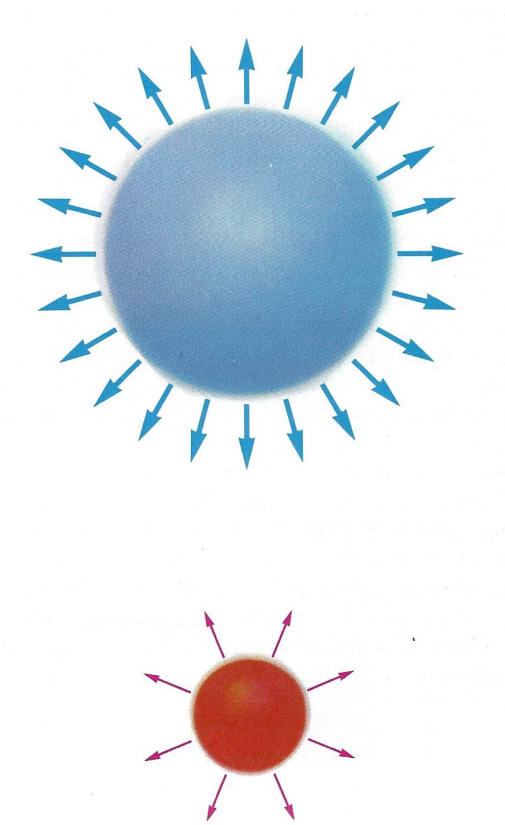


Figure 21.6. Stellar lifetimes. The more massive blue star loses its energy faster than the smaller red star, resulting in the blue star burning out faster.

Revised: 7/11/2021