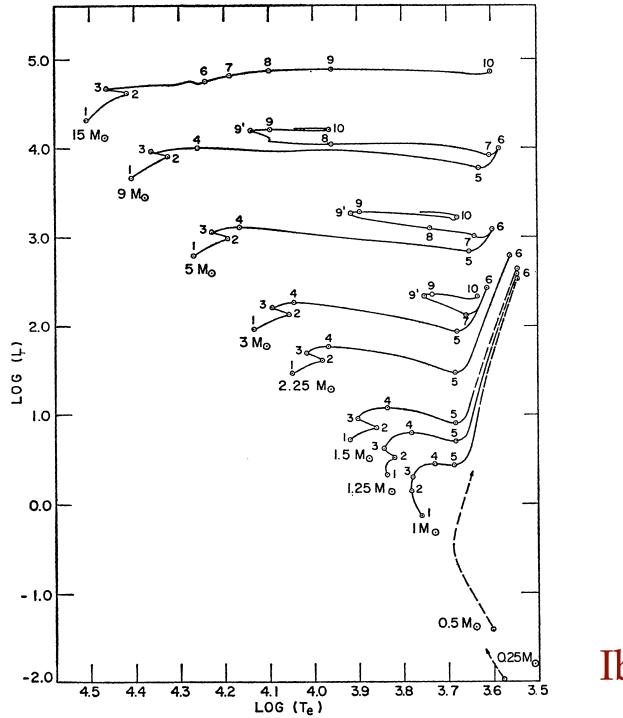
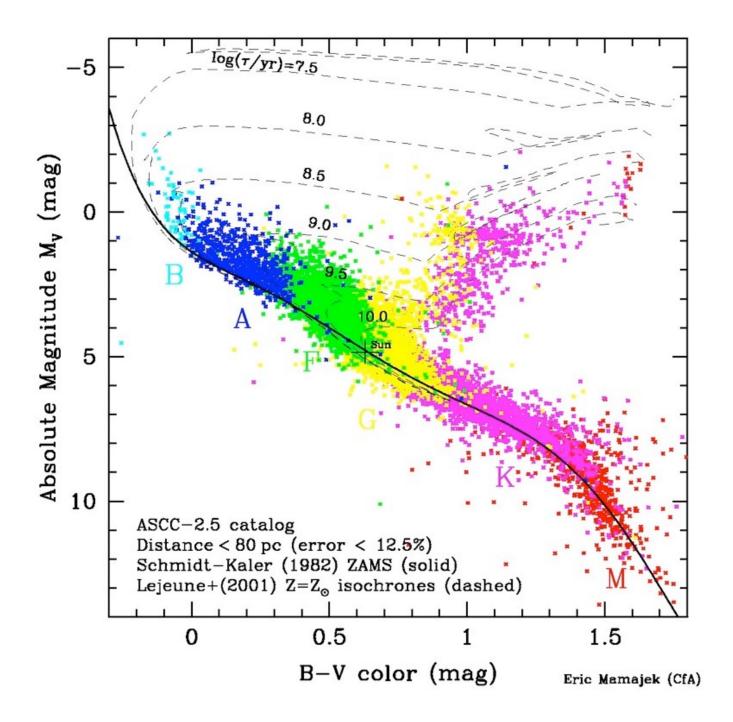
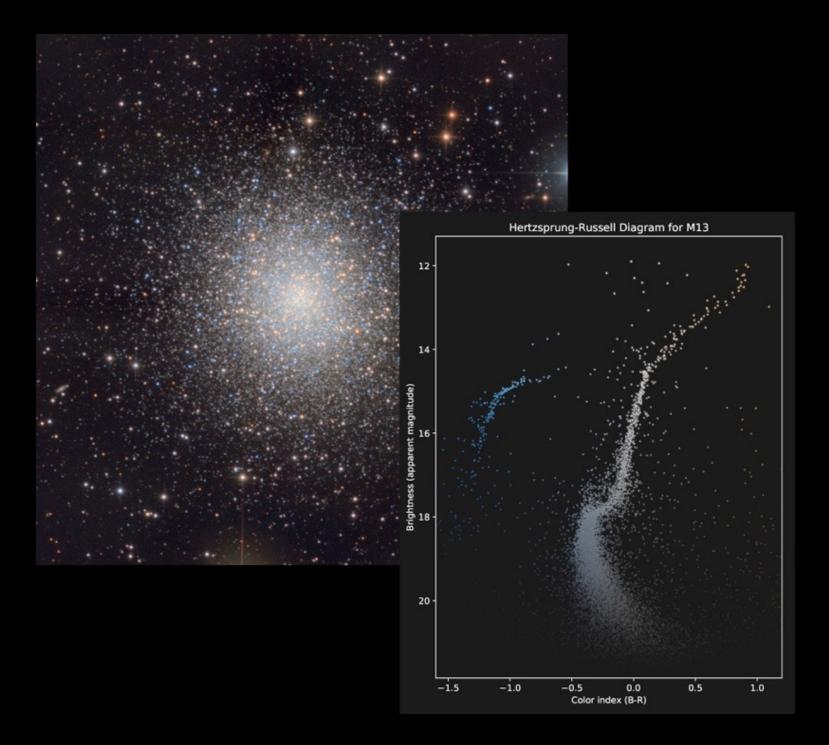
Structure and Evolution of Stars

Lecture 12

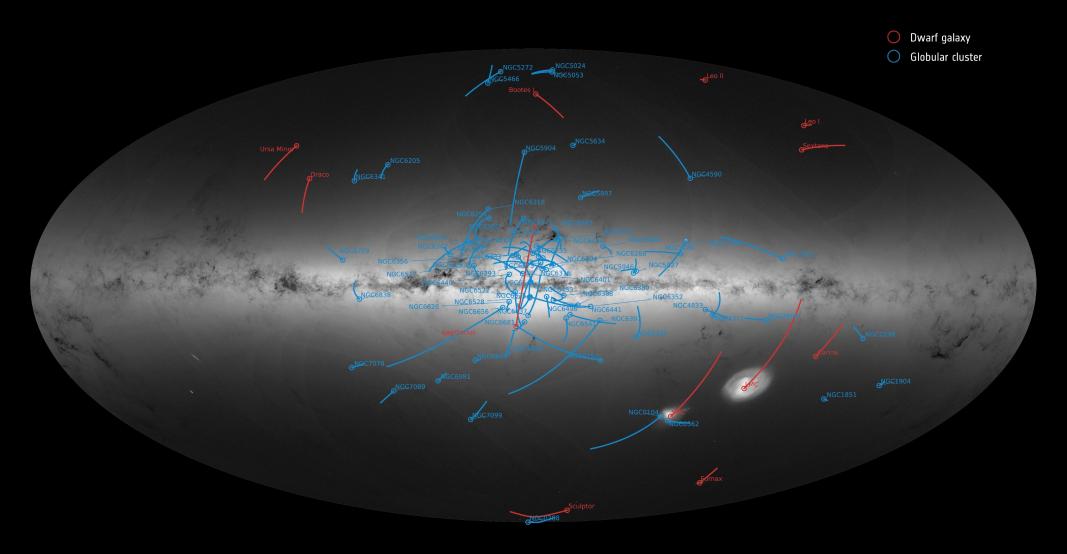








→ GAIA'S GLOBULAR CLUSTERS AND DWARF GALAXIES

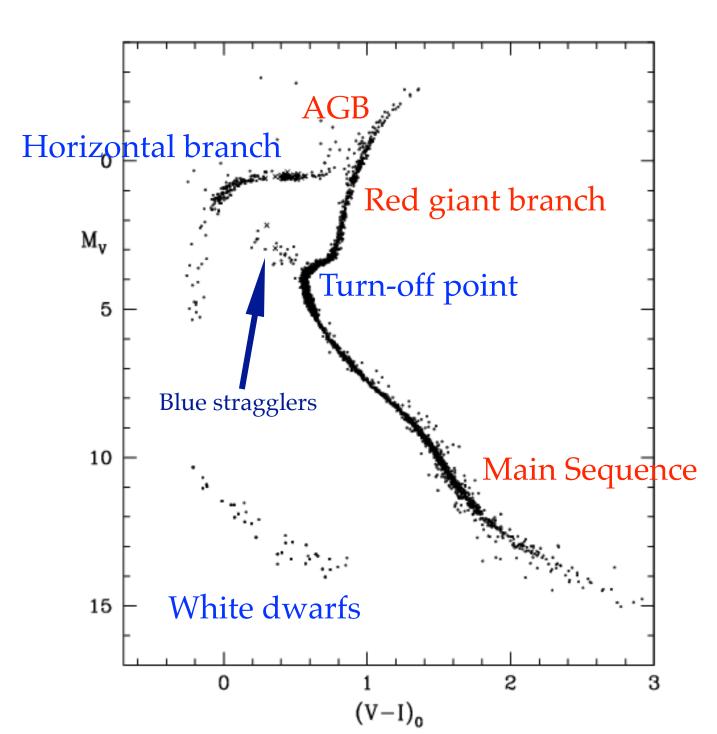


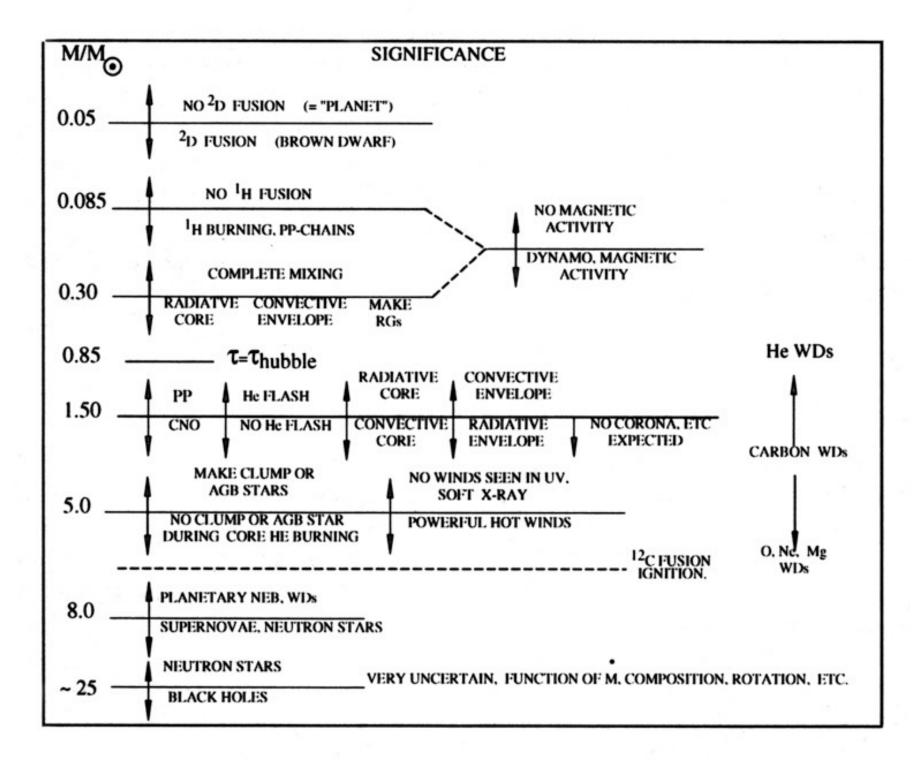
www.esa.int

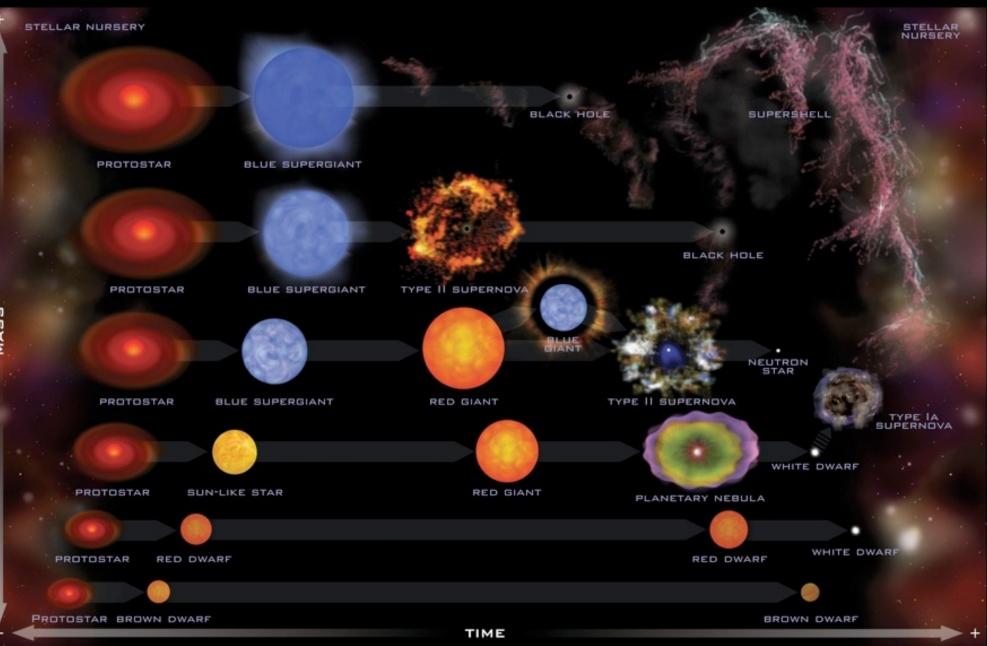
Credit: ESA/Gaia/DPAC

European Space Agency

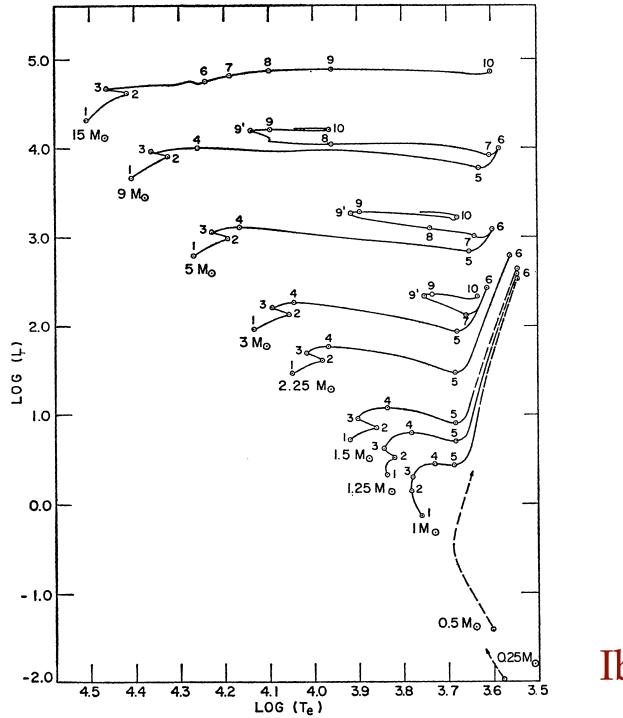
HR diagram of a typical globular cluster



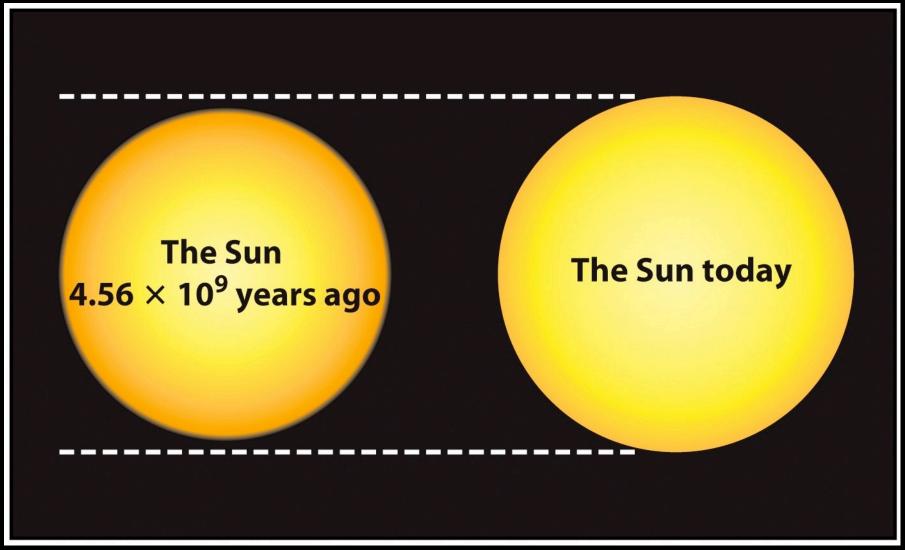




MASS

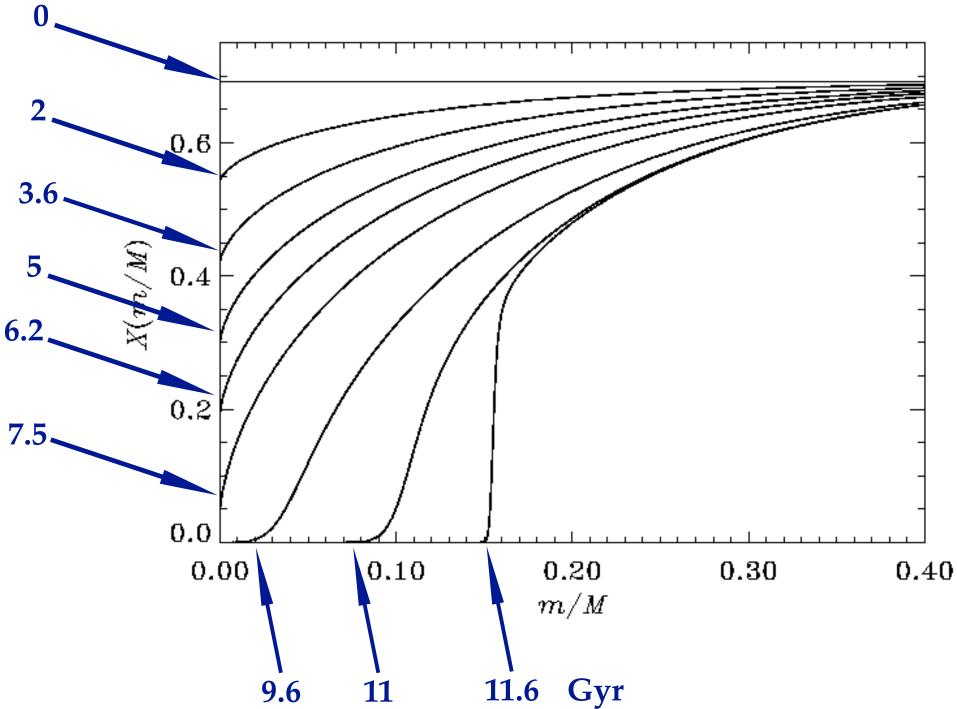


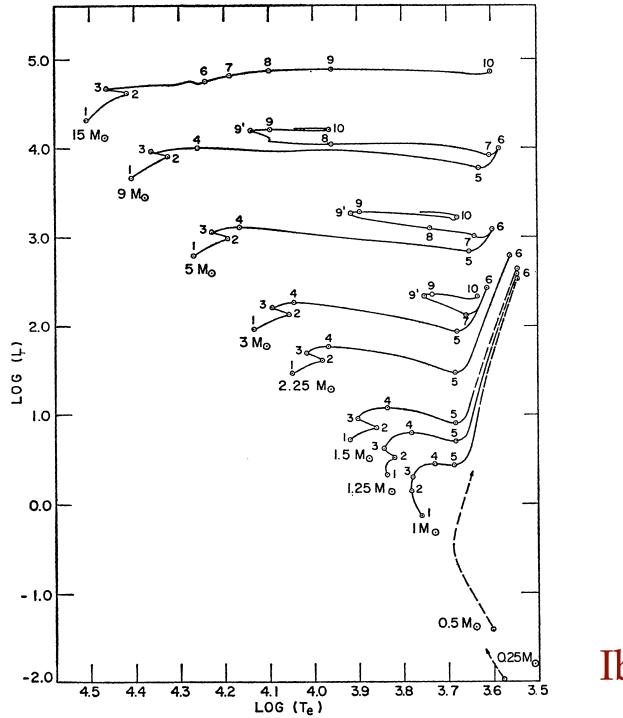
Gradual change in size of Sun

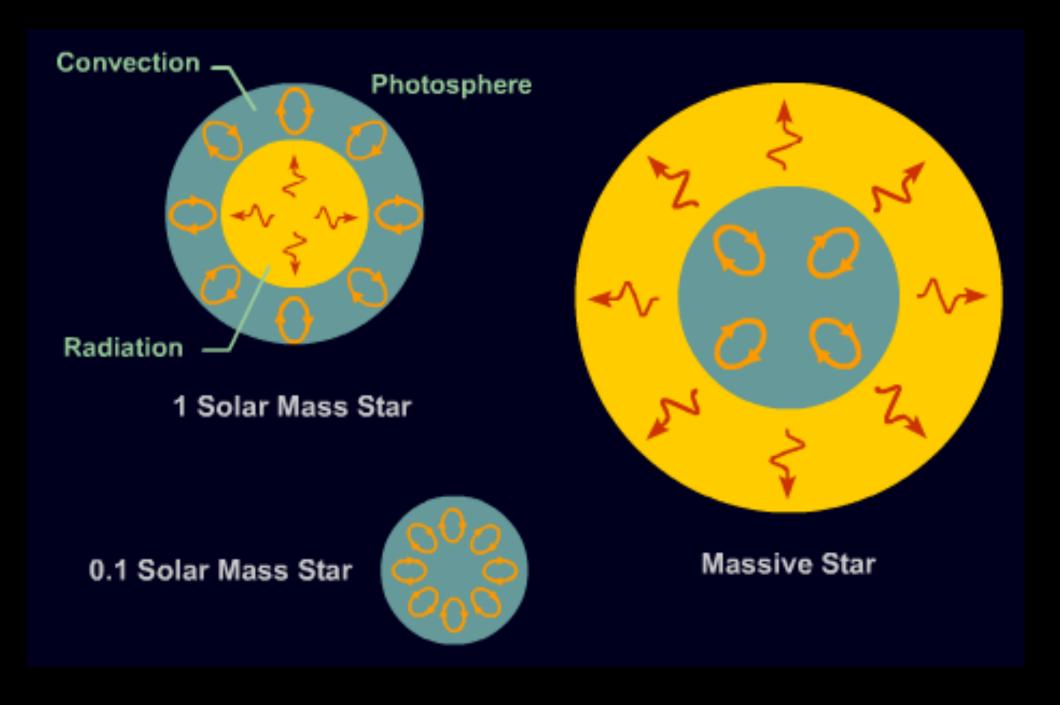


Now 40% brighter, 6% larger, 5% hotter

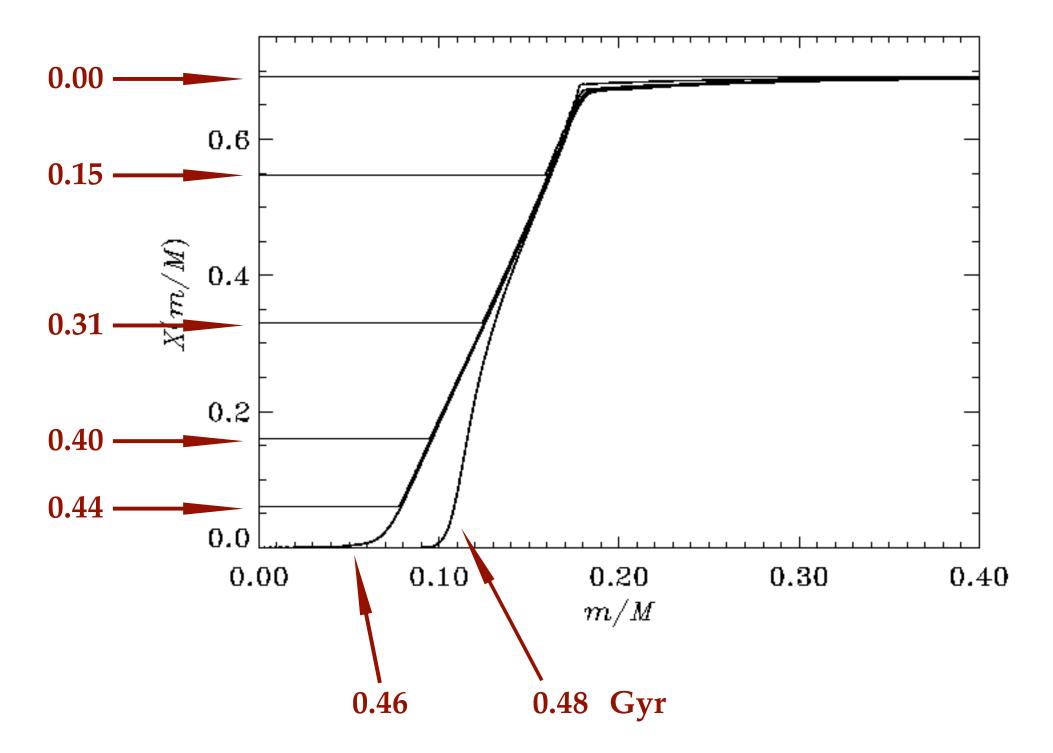
low mass

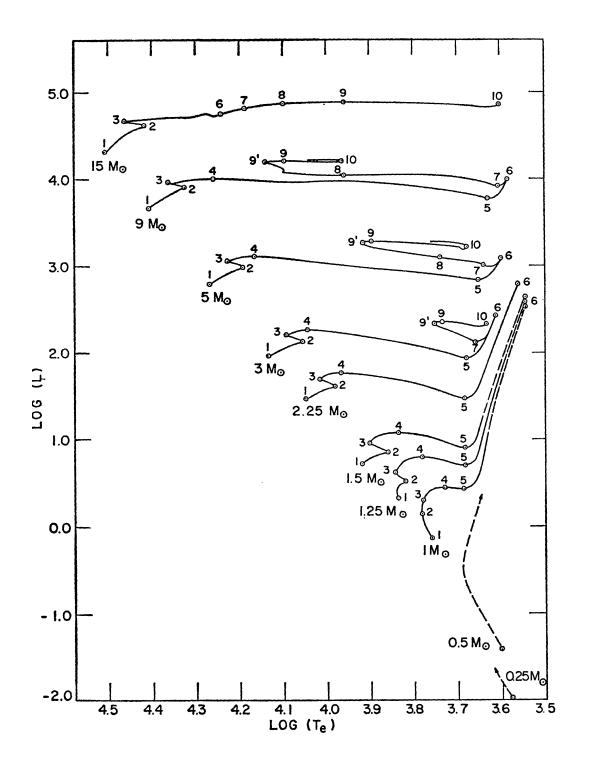




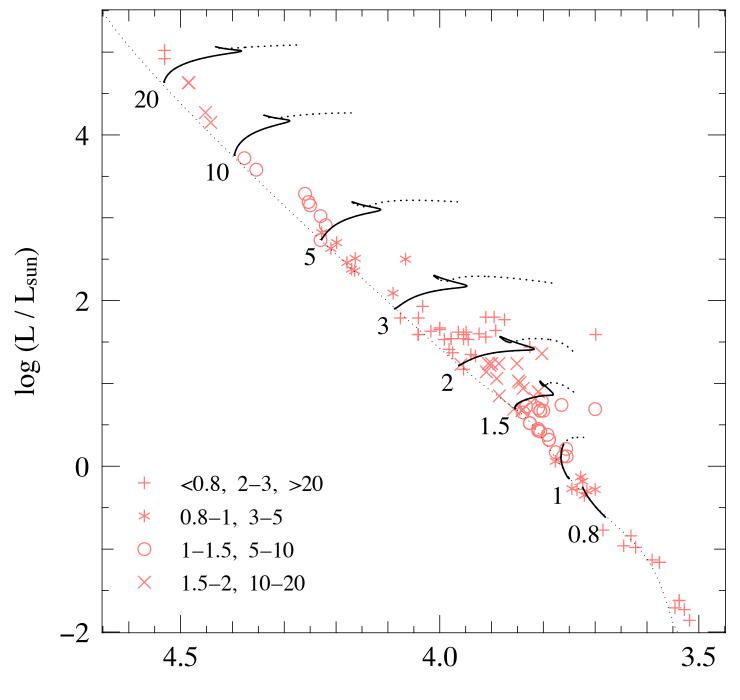


ingii mass

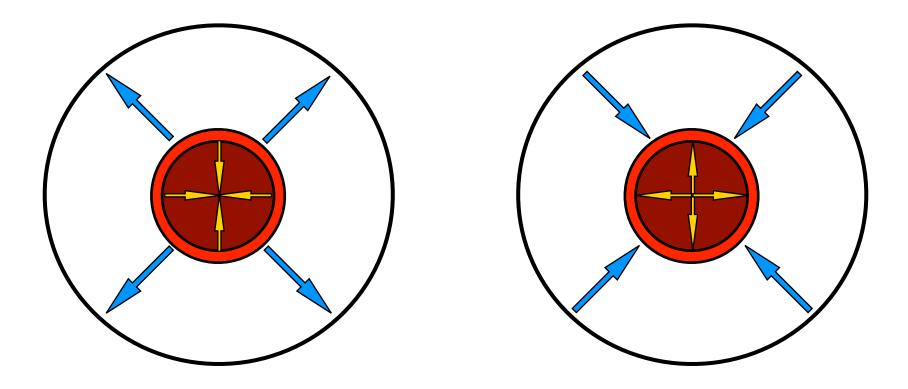




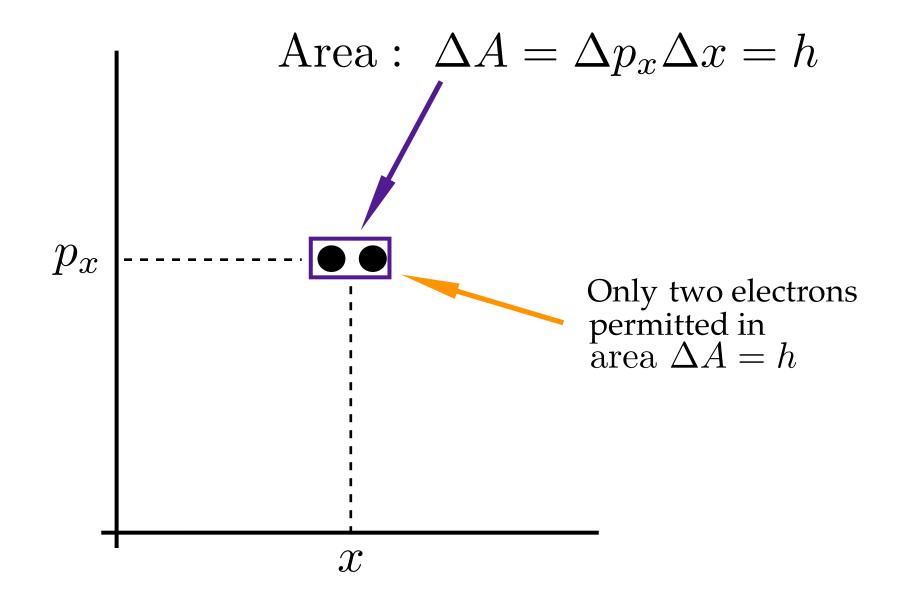


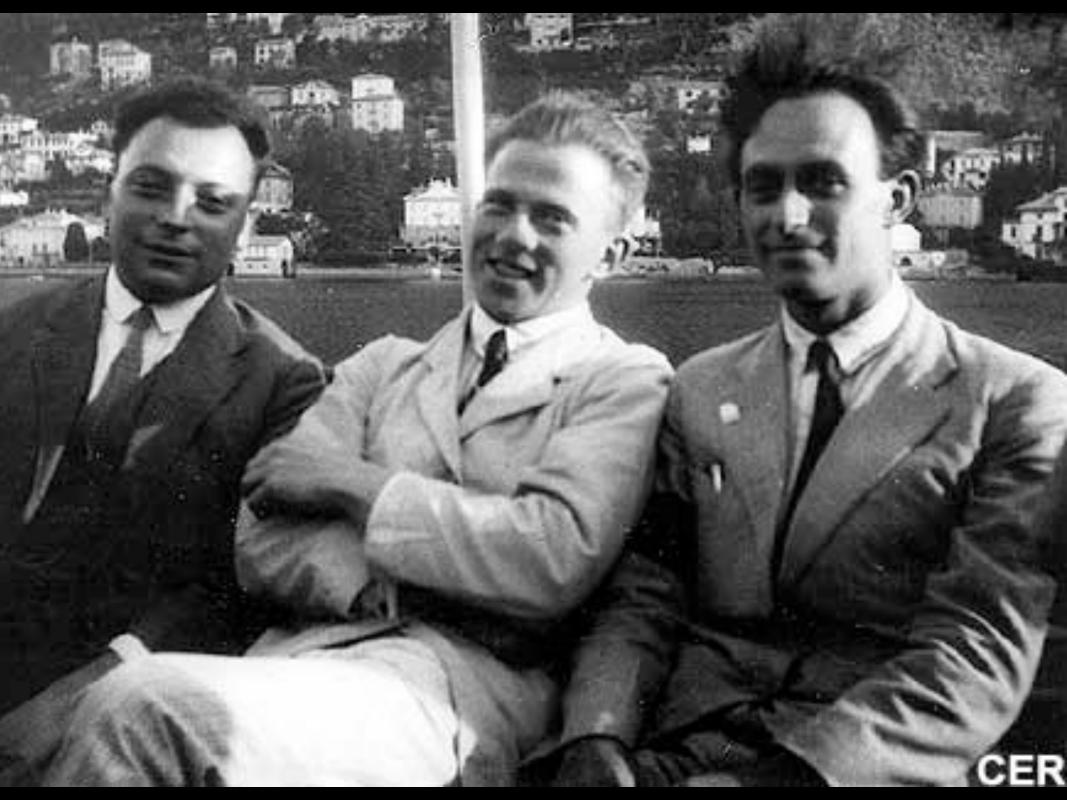


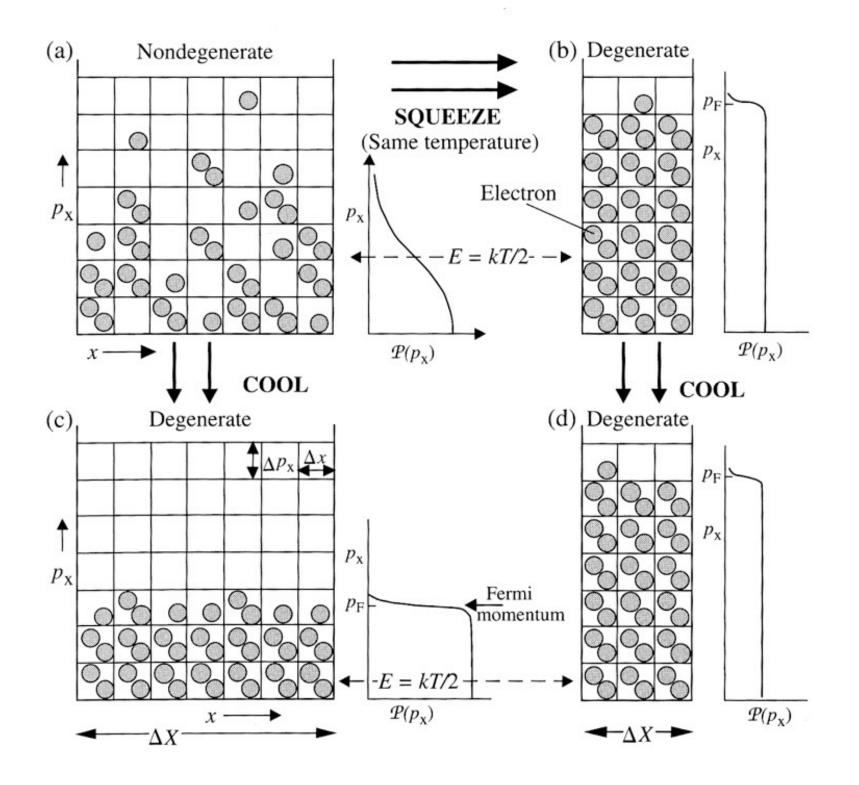
 $\log T_{eff}(K)$

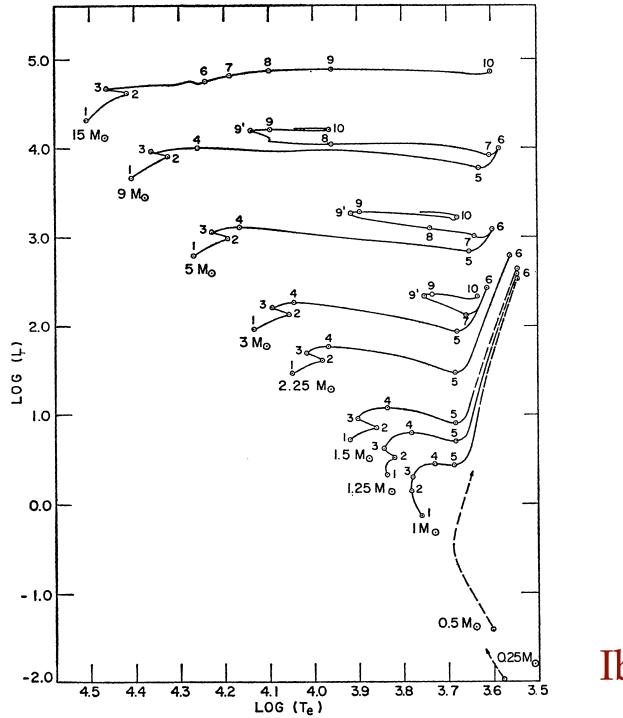


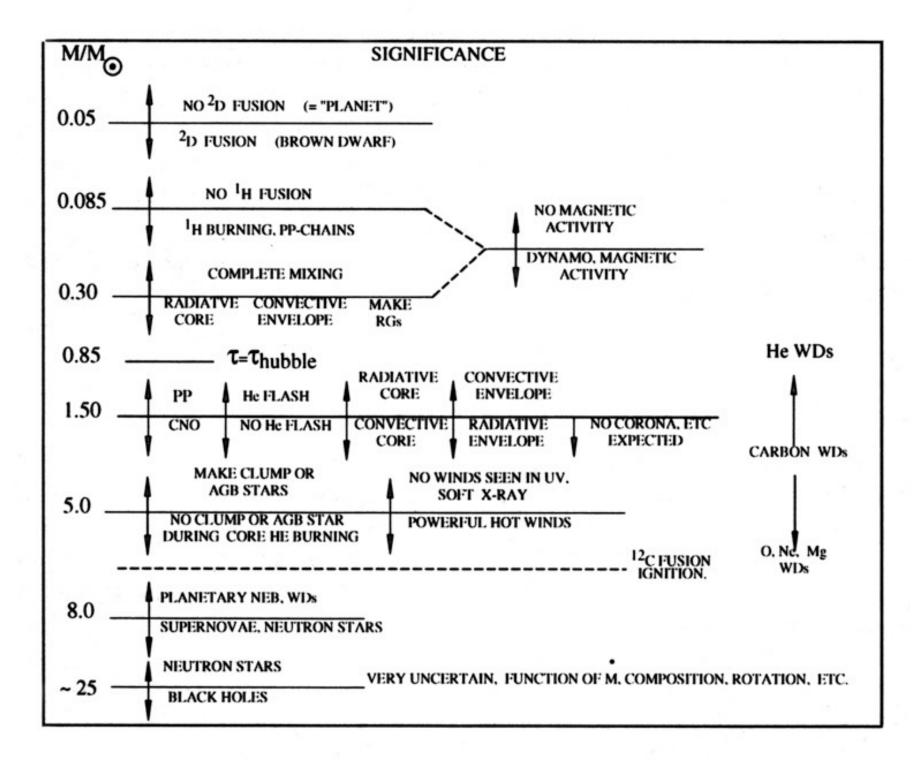
The Mirror Principle of Shell-Burning Stars

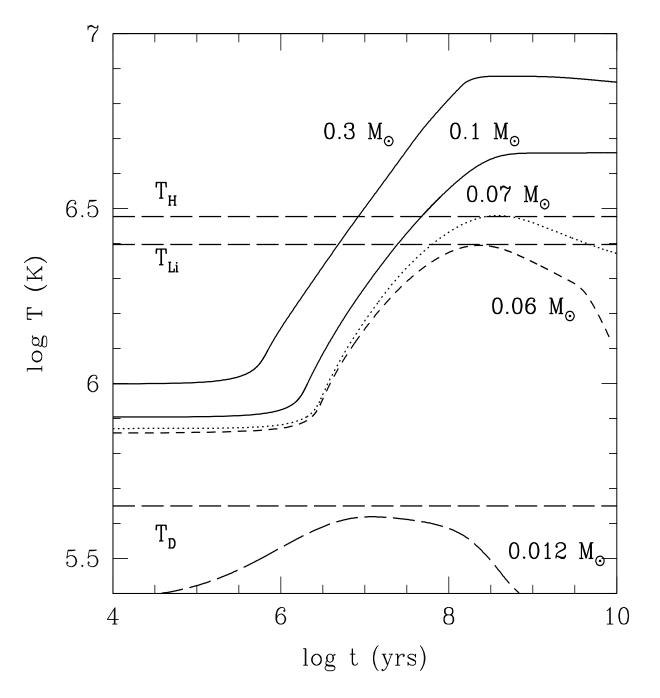






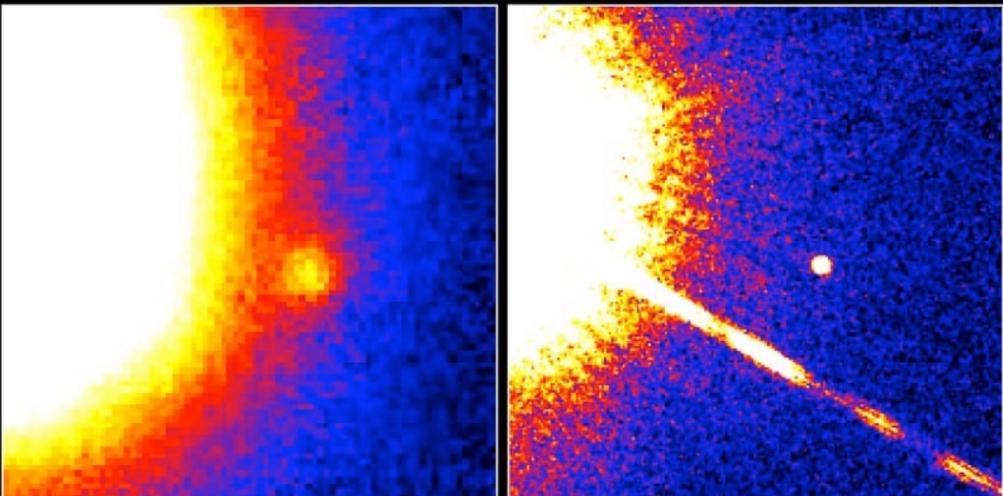






Chabrier & Baraffe 2000

Brown Dwarf Gliese 229B



Palomar Observatory Discovery Image October 27, 1994 Hubble Space Telescope Wide Field Planetary Camera 2 November 17, 1995

PRC95-48 • ST Scl OPO • November 29, 1995 T. Nakajima and S. Kulkarni (CalTech), S. Durrance and D. Golimowski (JHU), NASA





