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We discuss the internal structure of stars in the mass range 1.5 to 4 M_{\odot} from the PMS to the subgiant phase with a particular emphasis on the convective core and the convective superficial layers. Different physical aspects are considered such as overshooting, treatment of convection, microscopic diffusion and rotation. Their influence on the internal structure and on the photospheric chemical abundances is briefly described.

The role of binarity in determining the observed properties and as a tool to constrain the internal structure is also introduced.
