

In this code, we build the numerical model of a stellar interior for a star with a radiative envelope and a convective core, whose chemical composition is considered constant. To do this, we use numerical methods to solve the fundamental equations of the stellar interior. The integration of the equations is done in two parts, calculating separately the physical parameters corresponding to the envelope and the ones corresponding to the core. Both results will be joined later in the boundary between the radiative envelope and the convective core, after choosing the values of total radius, total luminosity and central temperature that give the best fit. Python has been used as the programming language to code the model.

This model was made as part of my dissertation for my Bachelor's degree in Physics, supervised by professors [Nicolás Cardiel](#) and [Sergio Pascual](#).