

TEST

- Solve TOV equations for different (two or more) EOS' and a set of values of the central density ϵ_c
- For each EOS, plot the neutron star mass $M(\epsilon_c)$. Discuss the stability of the solutions. Find the maximum mass M_{max} .
- For each EOS, plot the mass-radius relation $M = M(R)$. Find the values of the radius corresponding to $M = 1.4M_\odot$ and $M = M_{max}$.
- Discuss the differences between the results corresponding to different EOS' (role of stiffness, relevance of violation of causality ...)