

Stellar structure written report

Aspect	Excellent	Acceptable	Needs Improvement
Kept to length limit	Document is no longer than necessary to completely described the modeling process	Document is longer than necessary to completely described the modeling process	Document is not long enough to completely described the modeling process
Statement of the problem	The scientific problem and modeling approach is obvious	The scientific problem and modeling approach is implicit	The scientific problem and modeling approach is unclear
Clarity of assumptions	Assumptions are precisely stated	Assumptions are stated	Assumptions are vaguely stated or unstated
Description of work done	The modeling process is clearly described with maximum concision	The modeling process is described, but the description is too long	The description of the modeling process is incomplete
Numerical methods and boundary conditions	The numerical methods and boundary conditions used are clearly and concisely stated	The numerical methods and boundary conditions used are stated	The numerical methods and boundary conditions used are unclear
Model convergence	The report presents a converged model that took less than 50 iterations to converge	The report presents a converged model that took more than 50 iterations to converge	The report presents an unconverged model
Correctness of stellar structure	The presented stellar radius, luminosity, surface gravity, and effective temperature are within 10% of MESA results for a non-rotating ZAMS star with the same mass and metallicity	The presented stellar radius, luminosity, surface gravity, and effective temperature are within 25% of MESA results for a non-rotating ZAMS star with the same mass and metallicity	The presented stellar radius, luminosity, surface gravity, and effective temperature are inconsistent with the MESA results for a non-rotating ZAMS star with the same mass and metallicity
Conclusion	A clear and concise explanation why (or why not) the modeling process worked concludes the report	An explanation why (or why not) the modeling process worked concludes the report	The report concludes without commentary on why (or why not) the modeling process worked
Code quality	The modeling code follows all standard coding conventions, is clearly commented, and easy to review	The modeling code follows some standard coding conventions, is commented, and possible to review	The modeling code does not follow standard coding conventions, is not commented, and/or hard to review
Code output	The output of the code is clearly documented	The output of the code is documented	The output of the code is not documented
Visuals	The visuals used are both appealing to the eye and help communicate the material	The visuals used help communicate the material	The visuals used do not help communicate the material
Overall narrative	The overall narrative is compelling	The overall narrative is complete	The overall narrative is incomplete