Stellar evolution discussion

1) What input is needed

 Mass accretion on main sequence for Pop III

 Opacity tables / opacities (stellar atmospheres)

 Uncertainties on nuclear reaction rates: which things are presently least uncertain?

2) What should the models do internally?

3) What should the output be?

 Isochrones for stars below [Fe/H] <= -2.5 (what assumptions for model atmospheres?)

 Yields as a function of initial mass and metallicity

 Grids of stellar models: metallicities, masses: output of those would be alpha, carbon, iron, r-process, s-process, ejecta mass, ejected energy, luminosity, lifetime

 🡪 well-sampled at the low-mass end (so well-sampled in lifetime at late times)

What JINA projects should we nucleate around?

Tim Beers suggestion: try to do a start-to-finish set of calculations using the ‘best available’ data and models: go to town. Just do it! (Even if it doesn’t agree, let’s see what we get.) – iteration is the key. Maybe this is the approach to take?

What is the scope of these initial projects?