Time-dependent 1D treatment of convective core boundary mixing

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ABSTRACT

1. CONVECTIVE CORE BOUNDARY MIXING

Evan

- $1.1. \ Dissipation \ balanced \ convective \ penetration$
 - $1.2. \ Stiff \ boundary \ convective \ overshooting$
 - 2. EVOLUTIONARY PREDICTIONS

Cole & Mathias

3. COMPARISON WITH OBSERVATIONS

Cole & ??

4. DISCUSSION & CONCLUSIONS

Matteo, Evan, Mathias, & Cole

- 1. What core burning phases is this important for? When is this reasonable?
- 2. 9 & 15 Msun evolution w/ & w/o penetration to TAMS – then evolve consistently through post-MS
- 3. How does this impact compactness of a remnant

(Luger et al. 2021).

REFERENCES

Luger, R., Bedell, M., Foreman-Mackey, D., et al. 2021, arXiv e-prints, arXiv:2110.06271. https://arxiv.org/abs/2110.06271

