

Abstract Submitted
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The Death of the Biggest Stars¹ ALEXANDER HEGER, University of Minnesota, Twin Cities, BRIAN CROSBY, Michigan State University, KEN CHEN, University of Minnesota, Twin Cities — The mass of the first generation of stars is still not well constrained from calculations of the first generations of stars; in particular, some theoretical work on the existence of super-massive black holes as seen in quasars at high red shift do call for the formation of super-massive stars as the starting point for those black holes. In this paper we address the question what actually the lives of such stars would be, what is the nucleosynthesis in their interior, what are the different outcomes and mass limits. We will not address the controversial questions how such stars could actually form, but rather take the reverse approach to give us constraints for consequences and outcomes.

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