

Abstract Submitted
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Dust Formation in Core Collapse Supernovae¹ JENNIFER ANDREWS, GEOFFREY CLAYTON, Louisiana State University — Recent detections of large amounts of dust in high redshift galaxies suggest that core collapse supernovae (CCSNe) may play an important role in the dust budget of the universe. At an age of only 1Gyr, there has not been enough time for low-mass stars to form and evolve to the asymptotic giant branch, but there has been sufficient time for CCSNe, which quickly evolve and return their material to the surrounding interstellar medium. For the past three years, we have been following numerous, nearby CCSNe with Gemini, HST, and Spitzer to look for indications of dust formation, which appear within the first few years of explosion. With our dataset containing large temporal and wavelength coverage, we have discovered unusual and interesting results. I will discuss these results and their implications for SNe as major dust contributors in the universe.

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