

The Death of Stars and the Evolution of Galaxies

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While supernovae steal the limelight, most stars die more slowly and gracefully, enriching their host galaxies with new fusion products and freshly formed dust. In order to understand how galaxies evolve chemically, we must learn how these stars die.

My investigations rely on infrared spectra to probe dust formation and its role in the final stages of a star's life, and photometry to investigate large samples. These sample include our own Galaxy and nearby dwarf galaxies on the Local Group, and much of our data are from large optical and infrared surveys which are available in public archives. These days, all one needs to conduct cutting-edge research is a good internet connection and the ability to crunch lots of data!