

Mass Loss during Late Stellar Evolution

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Extensive post-main sequence mass loss occurs for low- and intermediate-mass (up to $\sim 8M_{\odot}$) stars on the asymptotic giant branch (AGB), and for the higher-mass stars during their red supergiant evolution. These winds have a profound effect on the evolution of the stars, as well as for the enrichment of the interstellar medium with heavy elements and grain particles. The mass loss on the AGB is the by far most well studied, but a good deal of the basic processes are still not understood or cannot be described in a proper quantitative way, e.g., the mass loss mechanism itself. Furthermore, these objects provide us with fascinating systems, where intricate interplays between various physical and chemical processes take place, and their relative simplicity in terms of geometry, density distribution, and kinematics makes them excellent astrophysical laboratories. In this review we will concentrate on those aspects of AGB mass loss that are particularly well studied using a large millimetre array.

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