

Formation Rates of AGB Stars and Planetary Nebulae

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We study the local population of AGB stars, and determine their densities and scale heights according to their masses, following the classification scheme proposed by Ortiz and Maciel (1994, *A & A* 287, 552), which discriminates the precursors of type I, II, and III planetary nebulae. The formation (or death) rates of AGB stars are determined by means of stellar evolution models, and are compared to the formation rates of planetary nebulae from the literature. A good agreement is found between these rates; however, the results are very sensitive to the adopted model, especially regarding the time spent at the thermal-pulse AGB phase. (FAPESP, CNPq)