



Searching for initial mass function variations in resolved stellar populations

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The initial mass function (IMF) succinctly characterizes a stellar population, provides a statistical measure of the end result of the star-formation process, and informs our understanding of the structure and dynamical evolution of stellar clusters, the Milky Way, and other galaxies. Detecting variations in the form of the IMF could provide powerful insights into the processes that govern the formation and evolution of stars, clusters, and galaxies. In this contribution, we review measurements of the IMF in resolved stellar populations, and critically assess the evidence for systematic IMF variations. Studies of the field, local young clusters and associations, and old globular clusters suggest that the vast majority were drawn from a "universal" IMF, suggesting no gross systematic variations in the IMF over a range of star formation environments, and much of cosmic time. We conclude by highlighting the complimentary roles that Gaia and the Large Synoptic Survey Telescope will play in future studies of the IMF in Galactic stellar populations.

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