The White Dwarf Age of NGC 2477

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We present deep photometric observations of the open cluster NGC 2477 using HST/WFPC2. By identifying seven cluster white dwarf candidates, we present an analysis of the white dwarf age of this cluster, using both the traditional method of fitting isochrones to the white dwarf cooling sequence, and by employing a new Bayesian statistical technique that has been developed by our group. This new method performs an objective, simultaneous model fit of the cluster and stellar parameters (namely age, metallicity, distance, reddening, as well as individual stellar masses, mass ratios, and cluster membership) to the photometry. Based on this analysis, we measure a white dwarf age of $1.035 \pm 0.054 \pm 0.087$ Gyr (uncertainties represent the goodness of model fits and discrepancy among models, respectively), in good agreement with the cluster's main sequence turn off age. This work is part of our ongoing work to calibrate main sequence turn off and white dwarf ages using open clusters, and to improve the precision of cluster ages to the $\sim 5\%$ level.