# Characterizing the stellar populations of NGC 1866

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We perform a comprehensive study of the stellar populations in the young Large Magellanic Cloud cluster NGC 1866, combining the analysis of its best-studied Cepheids with that of a very accurate colour-magnitude diagram (CMD) obtained from the most recent Hubble Space Telescope photometry. We use a Bayesian method based on new PARSEC stellar evolutionary tracks with overshooting and rotation to obtain ages and initial rotation velocities of five well-studied Cepheids of the cluster. We find that four of the five Cepheids belong to an initially slowly rotating young population (of $\sim$160 Myr), while the fifth one is significantly older ($\sim$300 Myr) and only compatible with high initial rotational velocity ($\omega \sim$0.9). The complementary analysis of the CMD with new PARSEC isochrones also suggests the presence of such two distinct populations. The observed main sequence and the turn-off are clearly split into two branches fitted respectively by the same ages and initial rotational velocities indicated by the analysis of Cepheids. Our study, based on new models with overshooting and rotation, reinforces the notion that some young clusters, like NGC 1866, harbour multiple populations.