

A new classification scheme for B-type stars.

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Abstract

The criteria for spectral classification of B-type stars were established almost 80 years ago from low-resolution spectra on photographic plates. Since *Hipparcos* measured accurate distances for nearby stars, it has been clear that, although sound in general terms, the current set of MK standard stars in the B range has many inconsistencies, with luminosity class not always reflecting the actual intrinsic brightness of an object. As part of the efforts to build the IACOB database of high-quality, high-resolution spectra of OB stars, we have gathered the largest existing collection of spectra of B-type MK standards. We have developed a new classification scheme, based on high-S/N spectra at resolving power $R = 4000$, that solves most of the inconsistencies of the original system. The result is a new list of standard stars that will be used for a catalogue in the *Gaia* RVS spectral range. (See poster).