

Poster

Splinter Populations

PHOTOMETRIC VARIABILITY IN GLOBULAR CLUSTERS

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It is well known, that most globular clusters (GC) contain photometric variable stars. Using differential photometry on MUSE data, we were able to detect most of the RR Lyrae stars and other bright variables in the studied GCs. The used broadband filters V and I were reconstructed from the MUSE spectra. The photometric precision achieved is in the range of 0.03 mag.

Since the MUSE data provides us with the whole spectral information, the Balmer lines H_α and H_β could also be examined for variability. Although only the two Balmer lines were analysed, the used algorithm can be easily extended to other spectral lines.

Possible candidates of new variable stars were found in both, the broadband and the narrowband filters, but further research is needed to eliminate false positives.