Pulsating pre-main sequence stars in young clusters

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New pulsating pre-main sequence (PMS) stars have been discovered in the young open clusters IC 4996 and NGC 6383 using CCD time series photometry in Johnson B & V filters. As the cluster ages are both lower than 10 million years, all members later than spectral type A0 are still contracting towards the ZAMS, hence being ideal candidates for the search for pulsation. Out of about a dozen of stars that lie within the boundaries of the classical instability strip in NGC 6383, only two PMS pulsators have been detected. In the case of IC 4996 variability has been detected for three out of 35 cluster members in the classical instability region.

We present latest discoveries of PMS pulsators in these young open clusters as well as recent theoretical results concerning the pulsational behaviour of PMS stars.