

## **Delta Scuti and Gamma Doradus variables in open clusters. Observations with a 35 cm telescope: first results**

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### **Abstract**

Variable stars in open clusters are an important tool to test stellar structure and evolution models because parameters such as distance, age, reddening, and initial chemical abundance can be assumed to be the same for all stars in the cluster and can be known accurately. In this work we performed an extensive literature research of the current knowledge of Delta Scuti and Gamma Doradus variables in open clusters aiming to search for possible correlations between the pulsational properties of the variables and the physical parameters of the host clusters. At the same time we have started a new search for pulsating stars in open clusters using the telescopes of the Sierra Nevada Observatory, specially a 35 cm diameter telescope called T35. Some preliminary results are shown.