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Photometry of GSC 762-110, a new triple-mode radially pulsating star

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Abstract

Context. Stars pulsating in three radial modes are very rare, only three examples are known in the Galaxy. These stars are very useful since their periods may be measured very precisely, and this will constrain the global stellar parameters and the models of the star's interior.

Aims. The purpose of this paper is to present a new example of the class of triple-mode radial pulsators.

Methods. A search for candidate multi-mode pulsators was done in public survey data. Time-series photometry of one of the candidates, GSC 762-110, was performed.

Results. GSC 762-110 was found to be a triple-mode radial pulsator, with a fundamental period of 0.1945d and period ratios of 0.7641 and 0.8012. In addition two non-radial modes were found, for which the amplitude diminished considerably over the last few years.

Here you can find the complete article

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Take a look to the SAO/NASA ADS Astronomy Abstract Services under the link <http://arxiv.org/abs/0712.1348>

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