
LAMOST observations in the Kepler field

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Abstract

The Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST) is new instrument with 4000 optical fibers attached to a 4-m telescope at the Xinglong observatory in China. In 2010, we initiated the LAMOST-Kepler project. We requested to observe the full field-of-view of the nominal Kepler mission with the LAMOST to collect low-resolution spectra for as many objects from the KIC10 catalogue as possible. The list of targets with a specific scientific interest consists of ~250 "standard targets" (MK secondary standard stars), ~7,000 "KASC targets" (targets of the Kepler Asteroseismic Science Consortium) and ~150,000 "planet targets" (targets from the planet search group). As these LAMOST spectra allow an independent and homogeneous determination of stellar parameters, they are providing extra constraints for asteroseismic modelling. During the first three years of operation, 10 of the 14 requested LAMOST fields have been observed resulting in more than 60,000 low-resolution spectra. In this talk, we present the results derived from the data gathered during the test phase and the pilot survey (2011 & 2012) by three different groups of collaborators: the Chinese team (ULySS code), the European team (ROTFIT code) and the American team (MKCLASS code). The resulting stellar parameters are compared to those given in the KIC10 catalogue and to those derived from other types of ground-based follow-up data already available in the literature.

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