Latest Spectra Catalog Released by LAMOST-Kepler Project

n international team led by Prof. Fu Jianning from Beijing Normal University and Dr. ZONG Weikai, the LAMOST youth researcher, together with researchers from Belgium, USA, Poland and Italy, released the spectra catalog, conducted in the survey period from 2012 to 2017, which has been undertaken by the LAMOST-*Kepler* project. This catalog will provide a huge database for the researches of many areas with the help of *Kepler* photometry, including asteroseismology, stellar activity and exoplanets.

The article is published online in *The Astrophysical Journal Supplement Series* on October 16, 2018 (Beijing time, Zong & Fu, *et al. ApJS*, 238, 30).

The LAMOST-*Kepler* project was initiated at the beginning of LAMOST pilot survey phase with an aim at measuring targets with *Kepler* photometry available. Now it counts 227,870 spectra of 156,390 stars, among which the project obtained atmospheric parameters and heliocentric radial velocity for 173,971 spectra of 126,172 stars. The common stars, i.e., both observed by LAMOST and *Kepler*, reached a number of 76,283, corresponding to about 40 percent of *Kepler* photometric targets.

With the previous survey spectra data (De Cat & Fu, *et al.* 2015, *ApJS*, 220, 19), researchers had published many scientific papers of very high impact, such as the study of the eccentricities of *Kepler* hosting-planets stars (Xie, *et al.* 2016, *PNAS*, 113, 11431), the metallicity of stars hosting Neptunian cousins



Sky coverage of all targets observed by the LAMOST-Kepler project. The stars observed by LAMOST and with the Kepler photometry are marked in Persian blue, others are in dark cyan. The numbers mark the position of the 14 LAMOST-Kepler fields. (Image by courtesy of FU Jianning's team)

of hot Jupiters (Dong *et al.* 2018, 115, 266), and the chromospheric activity of solar-like stars (Karoff *et al.* 2016, *NatCo.* 7, 11058).

LAMOST Researchers from the National Astronomical Observatories of Chinese Academy of Sciences (NAOC) also participated in this work.