

# The Importance of Non-VARIABLE Stars

Tahereh Ramezani, Ernst Paunzen  
 Masaryk University, Brno, Czech Republic  
 514009@mail.muni.cz

It is important to not lose sight of non-variable stellar objects, as they are very much needed for calibrating absolute fluxes and radial velocities.

Paunzen et al. selected all stars which have long cadence light curves available within the original Kepler mission.

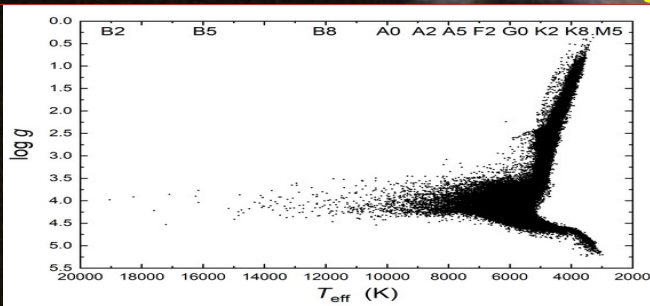
As next step, they removed all stars already known as variable. Then, investigated the location of the target stars in the HRD.

Fig.1 shows target star sample consists mainly of objects cooler than 10 000 K with most stars being solar type objects, including also a significant amount of objects on the sub-giant and red-giant branch.

There are no evolved intermediate and high-mass stars included.

There are two main reasons for the neglecting of the variability of the individual stars:

- 1) Establishing non-variability on the basis of a photometric time series is not straightforward
- 2) Demand of such objects is apparently not very high



## Results:

- 1) In total, 14 154 stars were found which fulfill the set criteria
- 2) These objects are mainly cooler than 7000 K populating the whole Main Sequence to the Red Giant Branch