

Poster

Splinter Exoplanets

LOOKING FOR PLANETS AROUND A TYPE STARS - DID WE MISS 166
OF THEM IN THE KEPLER FIELD?

Sabotta, S.¹, Guenther, E.W.¹, Kabath, P.², Klocova, T.²

¹ *Thüringer Landessternwarte Tautenburg, D-07778 Tautenburg, Germany*

² *Astronomical Institute ASCR, Fričova 298, 25165, Ondřejov, Czech Republic*

Up to now very little is known about close-in planets of stars that are more massive than the Sun. Detecting such planets is important because they challenge our current understanding of planet formation and migration.

Recently, Balona (2014) identified 166 possible short-period planets around A-stars in the Kepler-survey. The stars show peculiar variations in their light-curves which can neither be caused by the rotation nor by pulsation of the stars. Using the formulae described in Faigler & Mazeh (2011), we conclude that the variations have the same order of magnitude as that of the ellipsoidal, beaming and reflection effects on a Jupiter sized planet.

We have therefore obtained about 160 spectra of a small subsample of those "Balona Stars" with the two echelle spectrographs at the Tautenburg and Ondřejov 2m telescopes. In our poster we will show first results of our analysis and provide upper limits for the masses of those possible planets.