

Discovery of a New Optical Double Star in the Constellation Gemini

Joerg S. Schlimmer
Seeheim-Jugenheim, Germany
Email: js@epsilon-lyrae.de

Abstract: During observations in constellations Geminorium an optical companion of TYC1937-692-1 in a distance of about 5.7 arc seconds could be found.

Report

TYC1937-692-1 is not listed as double star in SIMBAD astronomical database or in WDS catalog. It is located 2 degrees east of 75 Geminorium. Its brightness is 11.23 magnitudes; the companion has an estimated brightness of 14 magnitudes. There is only a small proper motion of 9.5 in R.A and -12.2 in declinations [SIMBAD].

Two observations were made with a 12-inch Newtonian telescope in combination with a QHY 5LII-C CMOS Camera. Focal length was 1500 mm. Reproduction scale was about 0.52 as/pixel. For telescope control the planetary software Redshift 7 was used. The data analyses were done with the software program REDUC [Losse] and are given in Table 1.

Figure 1 shows the double star ES 421 (WDS07523+2842) and TYC1937-692-1. Distance between both is only 133 arc seconds. For the image 100 frames were stacked.

Acknowledgments

This research has made use of the SIMBAD database, operated at CDS, Strasbourg, France

This research has made use of the Washington Double Star Catalog maintained at the U.S. Naval Observatory.

References

- SIMBAD, CDS, Centre de Données astronomiques de Strasbourg, SIMBAD Astronomical Database, <http://simbad.u-strasbg.fr/simbad/>
Losse, Florent, <http://www.astrosurf.com/hfosaf/uk/tdownload.htm#reduc>

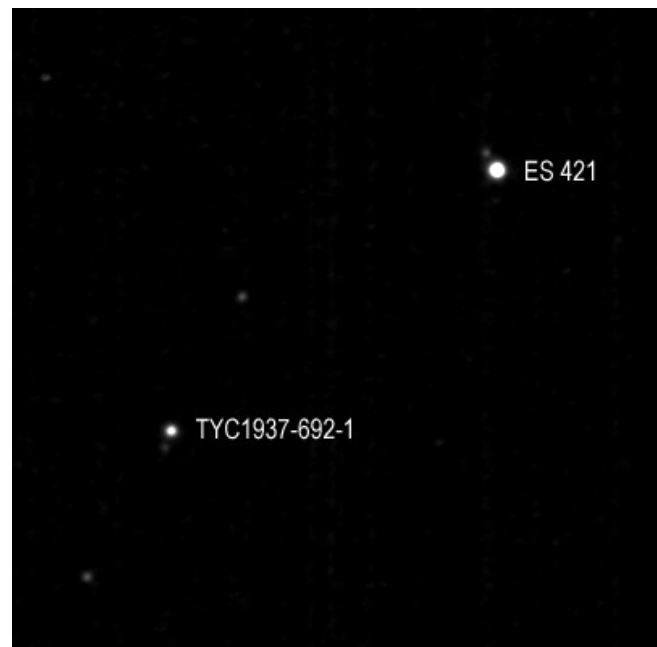


Figure 1.

Table 1. Measurements of New Double

Name	RA+Dec	Mag	PA	Sep	Date	N
TYC1937-692-1	07 52 10.6 +28 43 19.46	11.23	345.3	5.66	2018.279	2