

NEW CORONAGRAPH OF THE ASTRONOMICAL OBSERVATORY OF THE SLOVAK ACADEMY OF SCIENCES AT SKALNATÉ PLESO

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At the summit of Mt Lomnický štít, 2634 m a. s. l., a new coronagraph of the Astronomical Observatory of the Slovak Academy of Sciences at Skalnaté Pleso, built by C. Zeiss in Jena, has been installed in 1962. Fig. 1 shows the optical scheme of the instrument. Objective 1 is a simple lens, 20 cm in dia., and 300 cm focal length. In its focal plane is exchangeable Lyot diaphragm 2. The instrument is focused by moving the objective along the optical axis, which permits observations in the spectral region from 3930 Å to 10 800 Å. The intermediate optical system of the coronagraph is made up by field lens 3, further three members together with iris diaphragm 6, and imaging objective 8. Behind this objective is the space reserved for filter 9. The light pencils passing this space have the convergence 1 : 20 and the axes parallel to the optical axis of the instrument; thus, the maximum ray inclination to the optical axis is about $1^{\circ}25'$. The image of the Sun, 40 mm in diameter, is obtained in focal plane

10, where it can be observed visually or taken on film with a "Practina" type camera.

So far prominences have been observed with the coronagraph by using a Šolc filter 8 Å pass-band. A mirror spectrograph has been designed for observations of coronal lines.

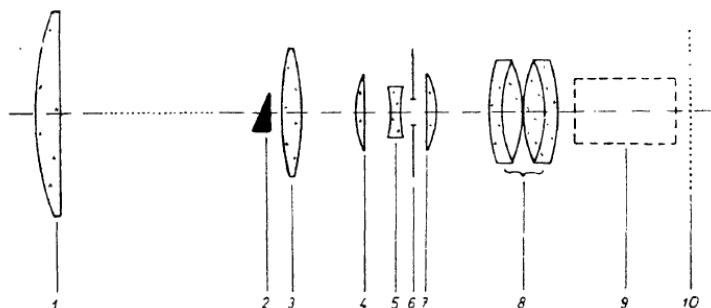


Fig. 1. Optical system of the coronagraph.