

Low dispersion spectrograph for weak objects

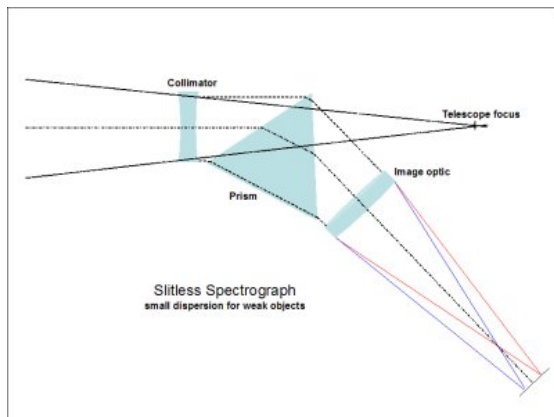
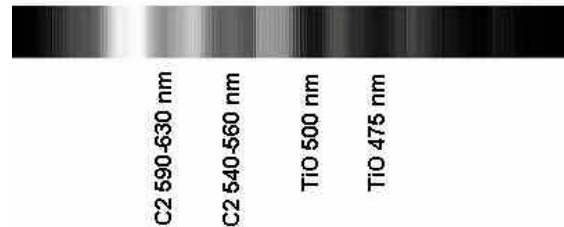
© Ernst Pollmann
Emil Nolde Straße 12 - 51375 Leverkusen



3. Mai 2006

A slitless spectrograph in the kind of "The Spectrograph of the Observatory Leipzig" (see: "Zeitschrift für Instrumentenkunde", 55/1935; can be requested at group leader).

Collimator: $f = -135\text{mm}$ (1:6)
Prism (Flint F2): 60°
Image optic: $f = 58\text{mm}$
Dispersion at $H\alpha = 1785 \text{ \AA}/\text{mm}$
 $R \sim 870$



On 25. April 2000 I could win the spectrum of the Mira variable R Leonis ($V=8\text{mag}$) with 120 seconds exposure only (see spectrum above) at a 20cm Schmidt-Cassegrain-telescope ($f/4$) in the observatory of [Vereinigung der Sternfreunde Köln](#).

Despite the relatively small resolution the substantial spectral characteristics of the star, the absorption bands of the C2 and the TiO are to recognize satisfyingly.

Ernst Pollmann

