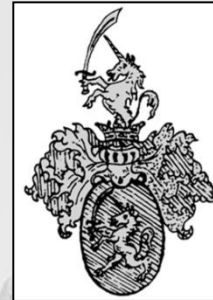


***150 years of the observatory in Hurbanovo  
and its significance  
for modern astronomy in Central Europe.***

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Komarnanska 137  
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[www.suh.sk](http://www.suh.sk)**

# Nicolaus Konkoly Thege

(Budapest, 20. January 1842 – Budapest, 17. February 1916)





## Early years

-1858 he introduced the important parts of his home made steam engine at Pannonhalm secondary school

-1859 became assistant of prof. Anyos Jedlik Physical Institute of Budapest's University

- 1859 his first official piano concert

-1861 study at University in Berlin

-1862 finished his study of law and nature sciences

-1862 – 1864 spent his time at European observatories

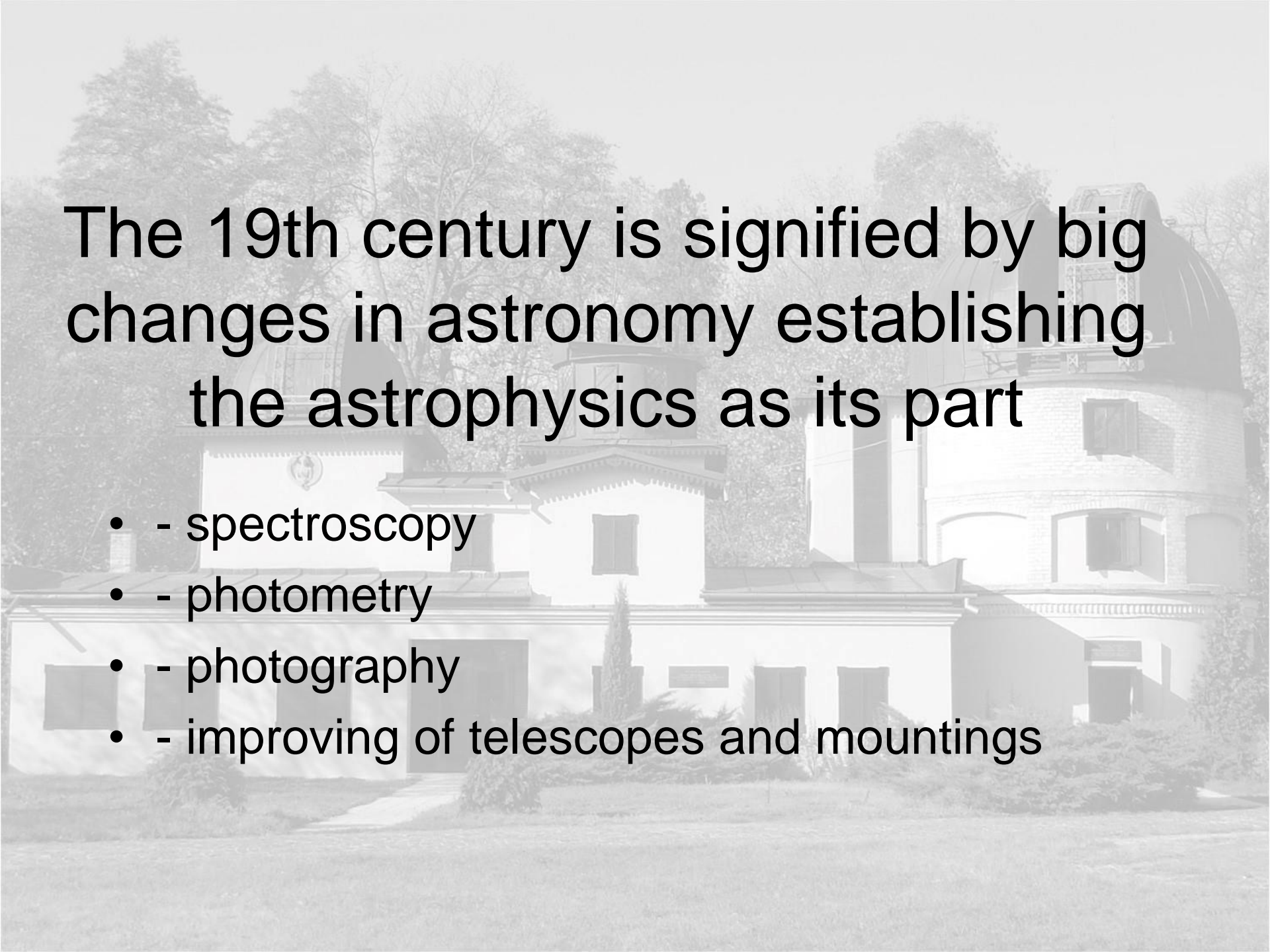
- 1865 – 1867 sailed Danube as a ship captain

1867 – 1870 worked in the County office in Komarom



In 1871 Nicolaus Konkoly Thege established his private observatory.



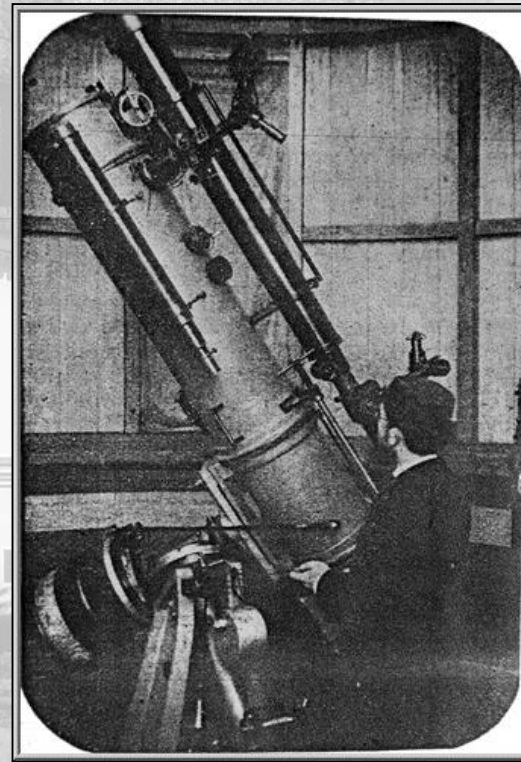
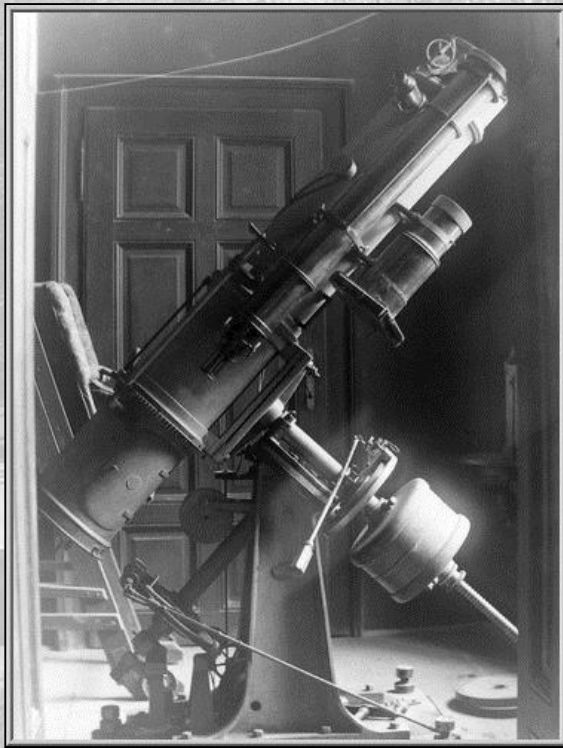


The 19th century is signified by big changes in astronomy establishing the astrophysics as its part

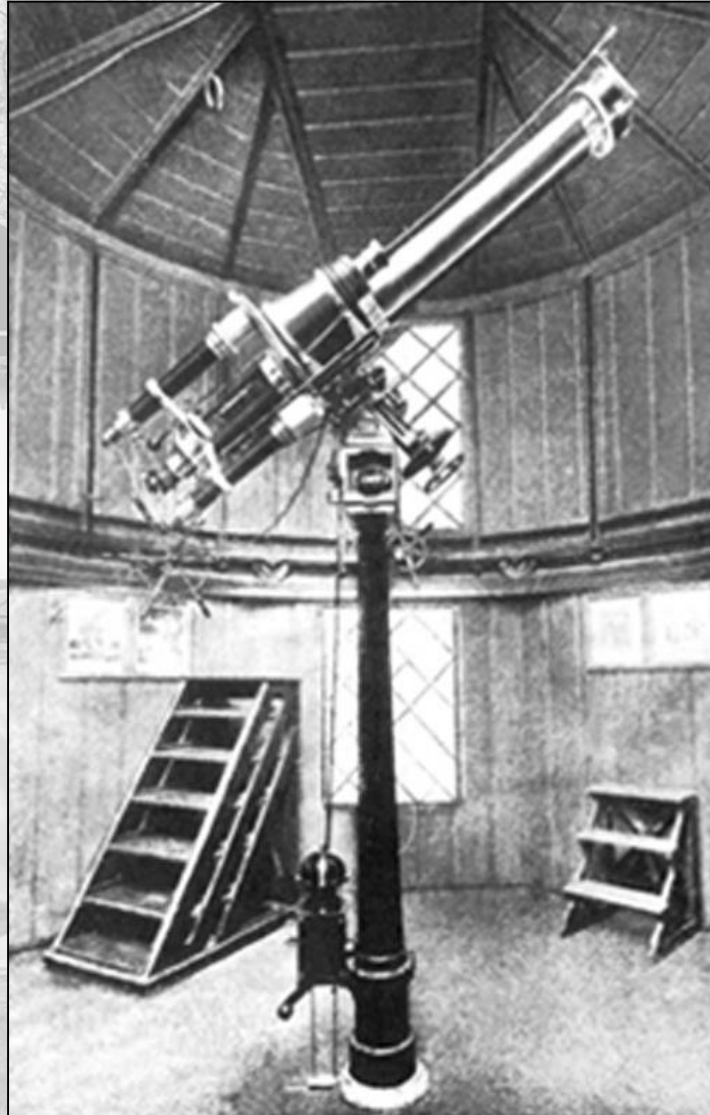
- - spectroscopy
- - photometry
- - photography
- - improving of telescopes and mountings



The first telescopes of the observatory were 10 inches Browning reflector and 6 inches Merc refractor sold in 1874 to Jenő Gothard



In 1874 the first telescopes were changed to 10 inches Merz – Konkoly refractor



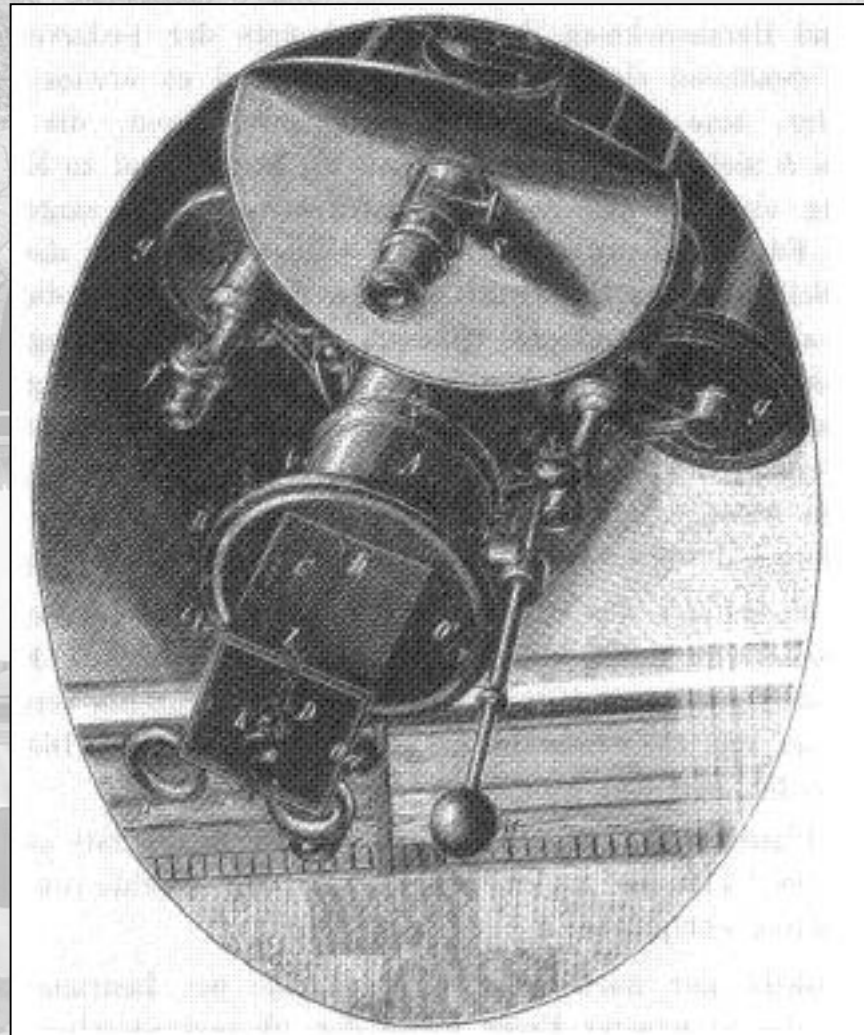


# Other astronomical instruments used by Konkoly Thege

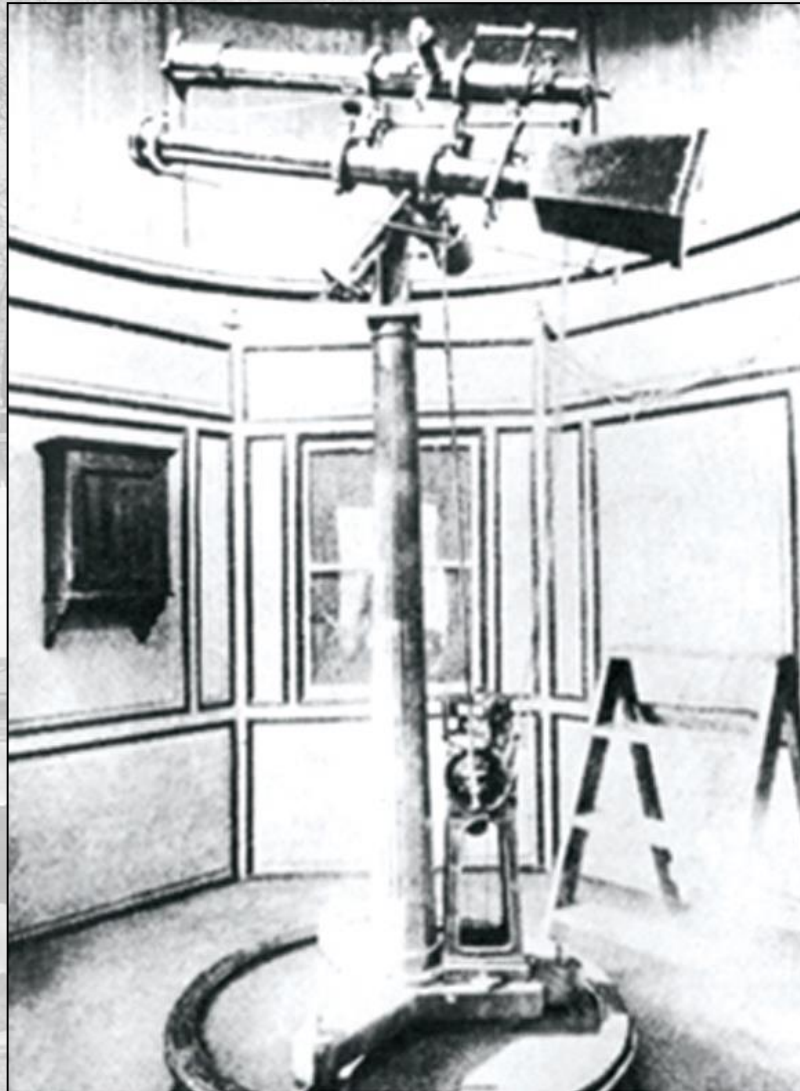


A finder of comets



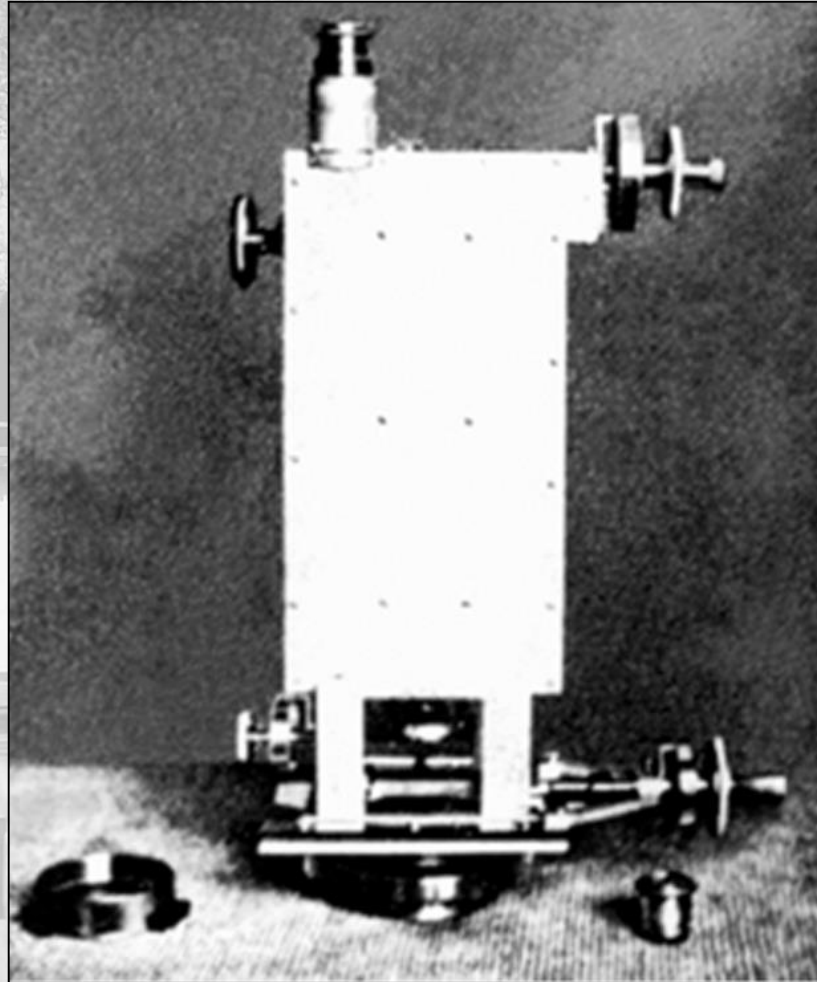


A camera connected to a telescope

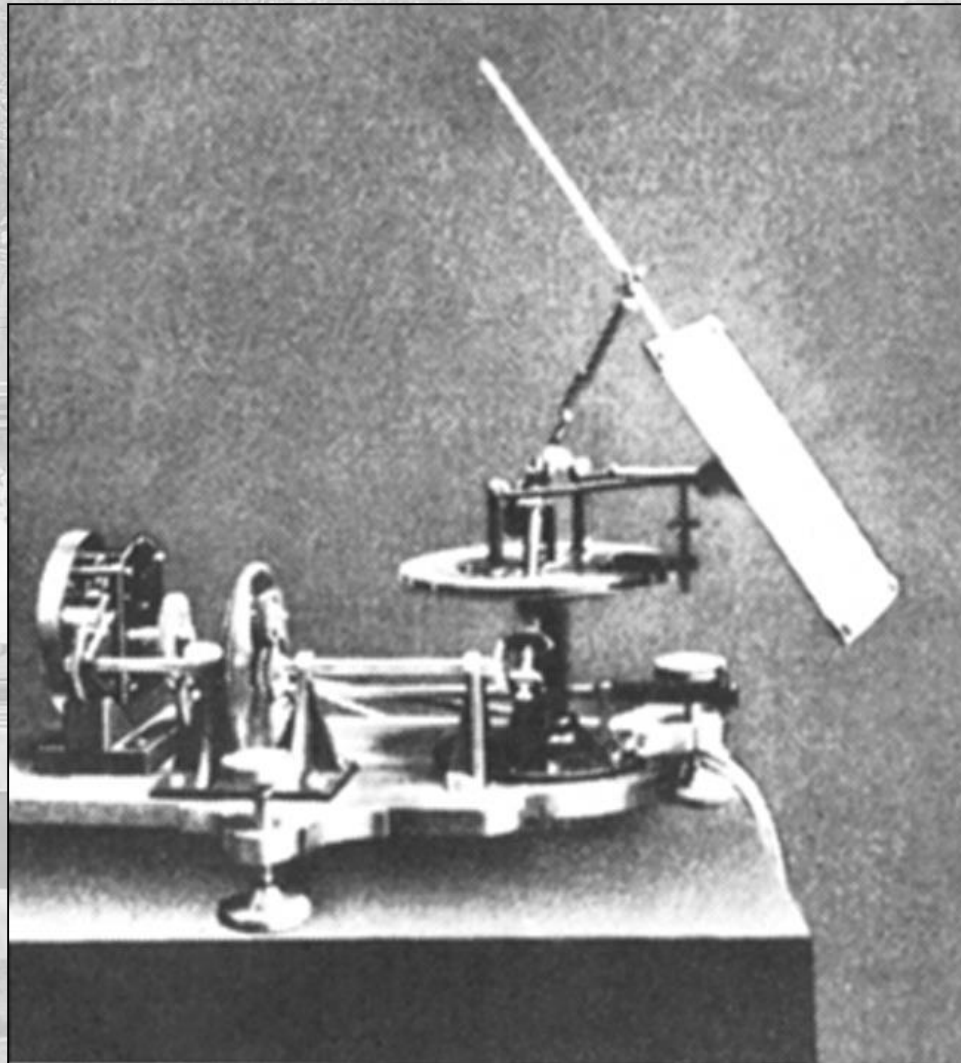


Steinheil – Konkoly's photorefractor

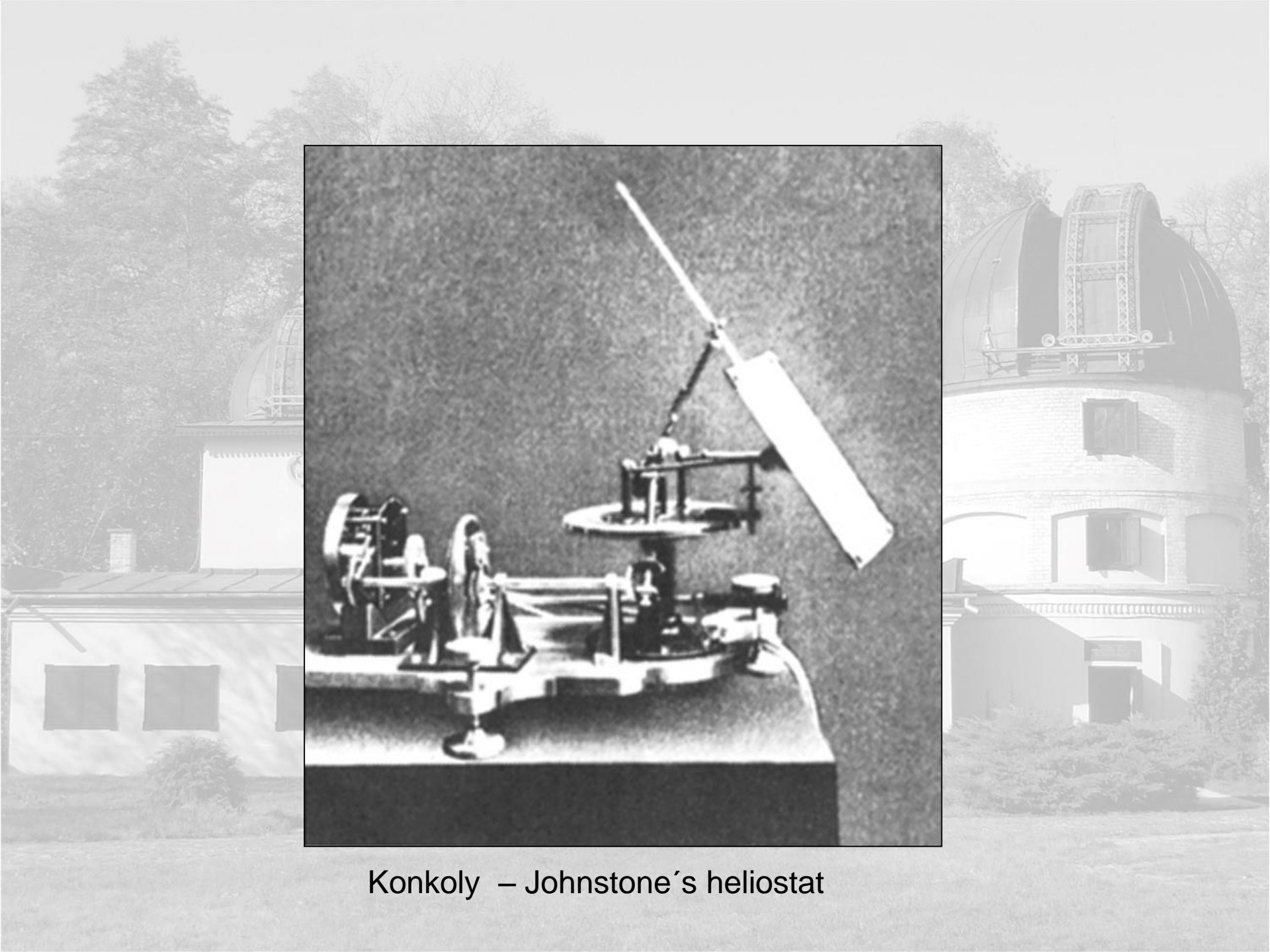




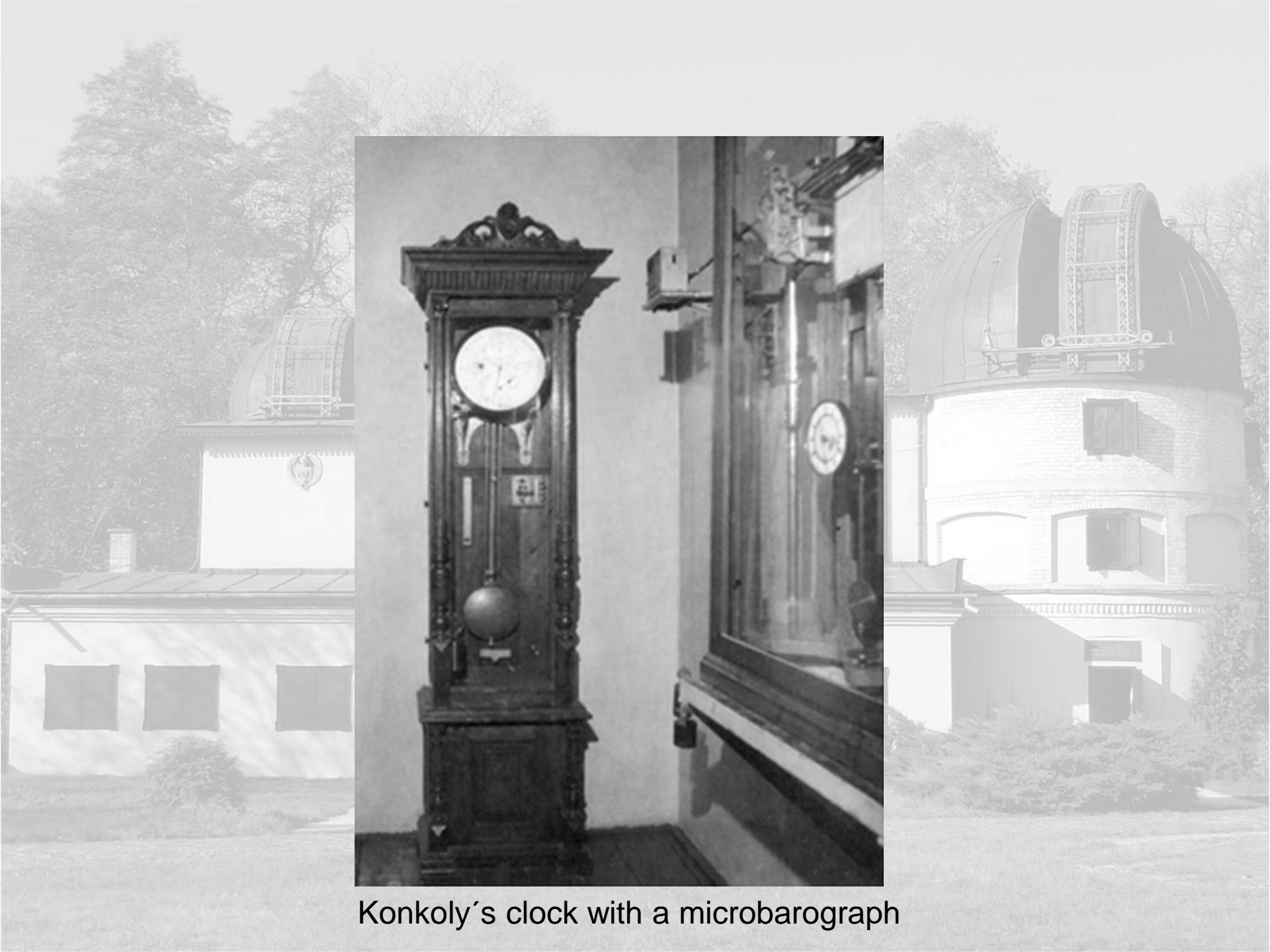
Konkoly's protuberance spectroscope



Konkoly – Johnstone's heliostat







Konkoly's clock with a microbarograph

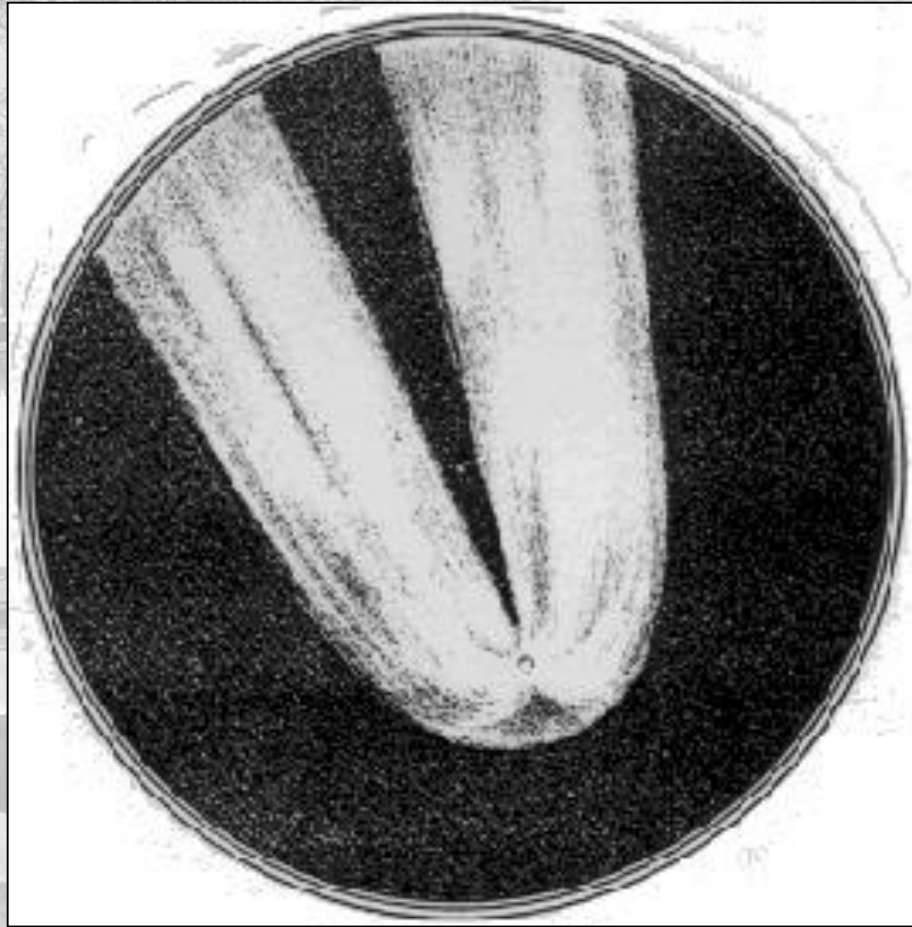
# Observing programs of the Observatory

- Regular Sun observation since 1872 (sunspots positions)
- Planets observations – drawings of Jupiter and Mars (red spot on Jupiter)
- Spectroscopy of comets and meteors
- Star clasification
- Meteors observations





Sunspots drawing



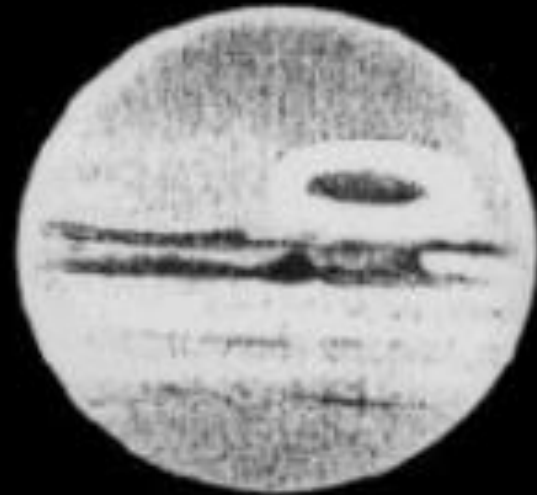
Drawing of comet Coggia 1874





1879 October 29

9<sup>h</sup> 40<sup>m</sup> Gy. K. I.



1879 November 27


5<sup>h</sup> 10<sup>m</sup> Gy. K. I.

Drawings of Mars and Jupiter



N. Konkoly and J. Hartmann during their observation of Halley's comet in 1910





Nicolaus Konkoly Thege wrote three books

"Praktische Anleitung zur Anstellung ASTRONOMISCHER  
BEOBACHTUNGEN mit besonderer Rücksicht auf die ASTROPHYSIK"

(Nebst einer moderner Instrumentenkunde)

(Practical guide on astronomical observations with main point to astrophysics  
and overview on modern instruments)

"Praktische Anleitung zur HIMMELSPHOTOGRAPHIE

nebst einer kurzgefaßten Anleitung zur moderner photographischen Operation  
und der SPEKTRALPHOTOGRAPHIE im Cabinet."

(Practical introduction to photography of the sky and draft of modern photohraphy  
and spectroscopy in laboratory)

"Handbuch für SPEKTROSCOPIKER IM Cabinet und am Fernrohr.

Praktische Winke für Anfänger auf dem Gebiete der Spektralanalyse.,,

(Handbook of spectroscopy in laboratory and next to the telescope. Practical  
warnings for beginners in spectral analysis)

In 1890 Konkoly Thege became a director of Hungarian Royal Institute of Meteorology and Geophysics





On 31 of October 1896 Konkoly Thege became a member of Hungarian Parliament for Liberal Party. He was the member of parliament till 1904

There he worked as the member of public traffic committee



In 1899 he established the Geomagnetic observatory in Hurbanovo and the Astronomical observatory became the state observatory





In the beginning of 20 century there were 11 domes in the site of the observatory







Heyde's dome



An astronomical pavilion in the island of a little lake in the park of the observatory.



In 1910 Komarom and Nove Zamky were connected by rail.  
Konkoly was a driver of the first train.





Konkoly Tehge was a good piano player and also composed several songs



# HIMMELSTRAUER.

von Leise.

Musikalische Dichtung

mit einer Singstimme.

Langsam bewegt. In Ninian's Toge von Kinsky.

PIANO.

Esas beider | wir | Langsam.

Esas beider werden

Langsam getragen, als die Beute.

Am Hin, rote Ant. - Un. wendel die Gr. das. be.







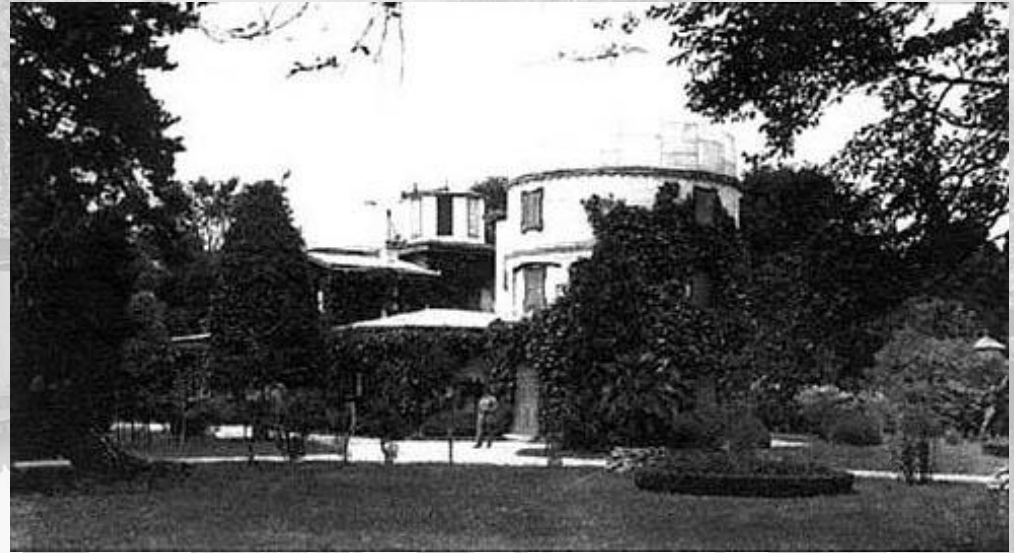
***Activities of the observatory in Stará Ďala  
(at present time Hurbanovo)  
between two world wars.***



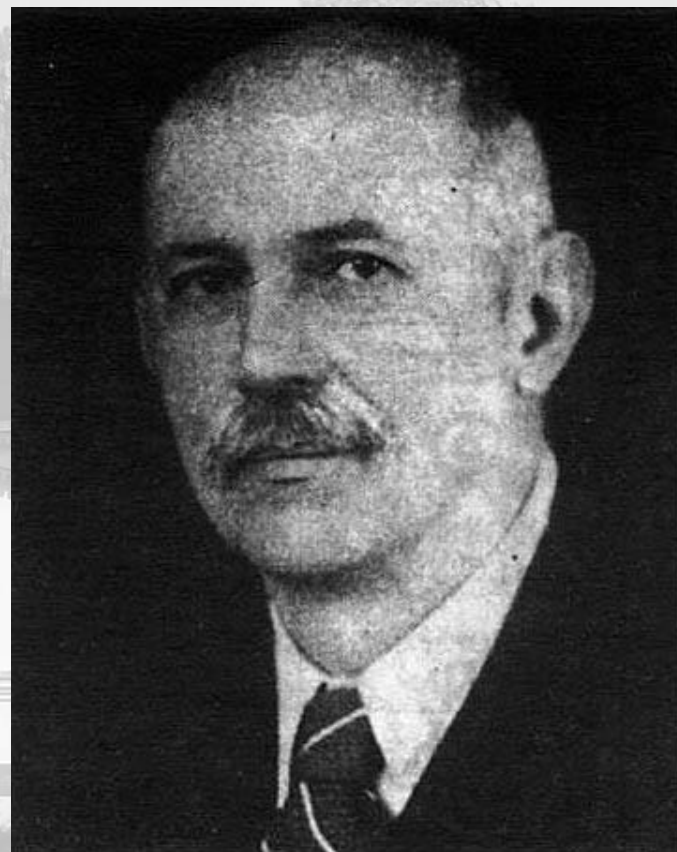




Astronomical tower  
of Klementinum observatory  
in Prague



Observatory in Stará Ďala (Hurbanovo)  
in 1930th

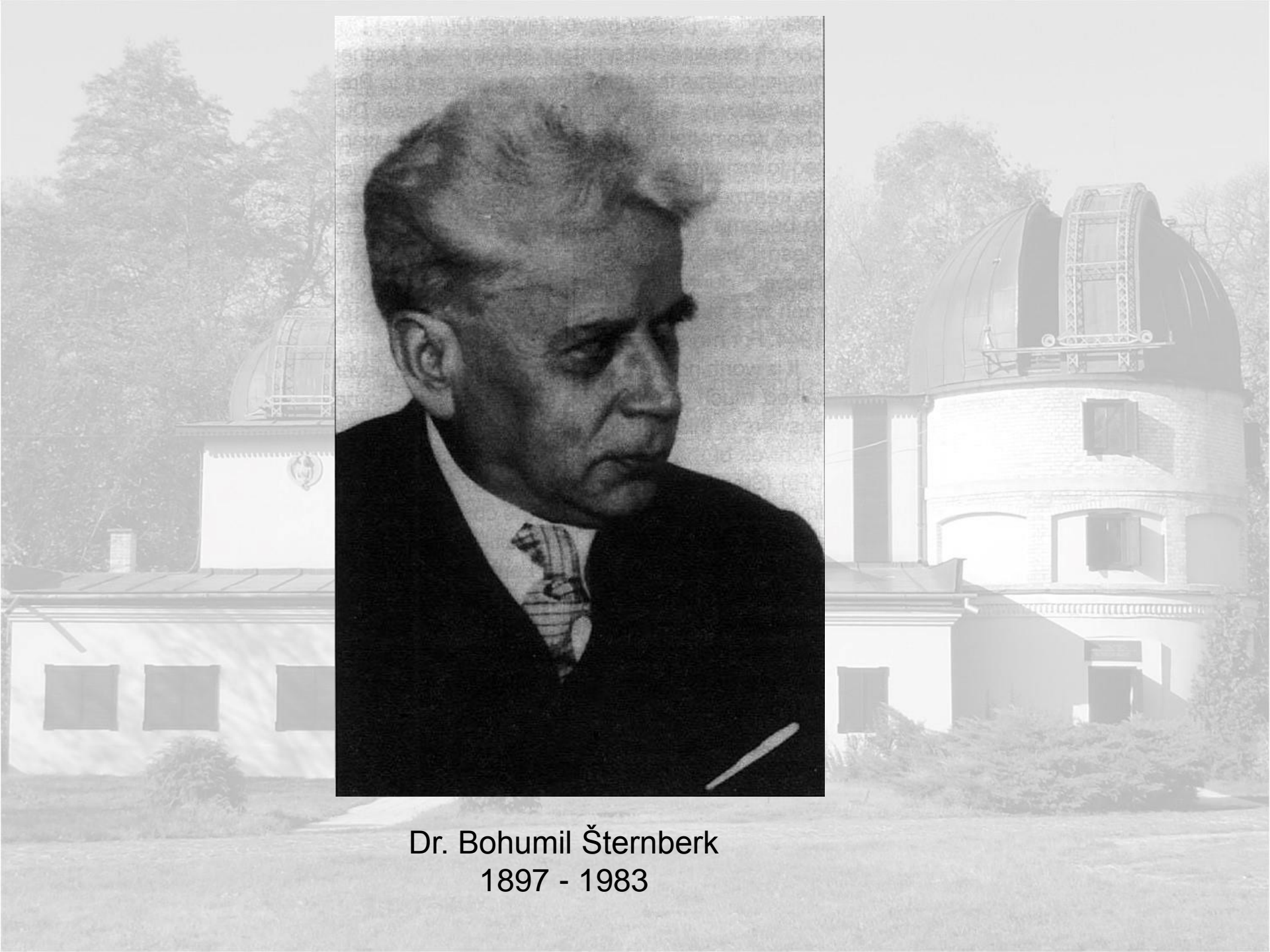


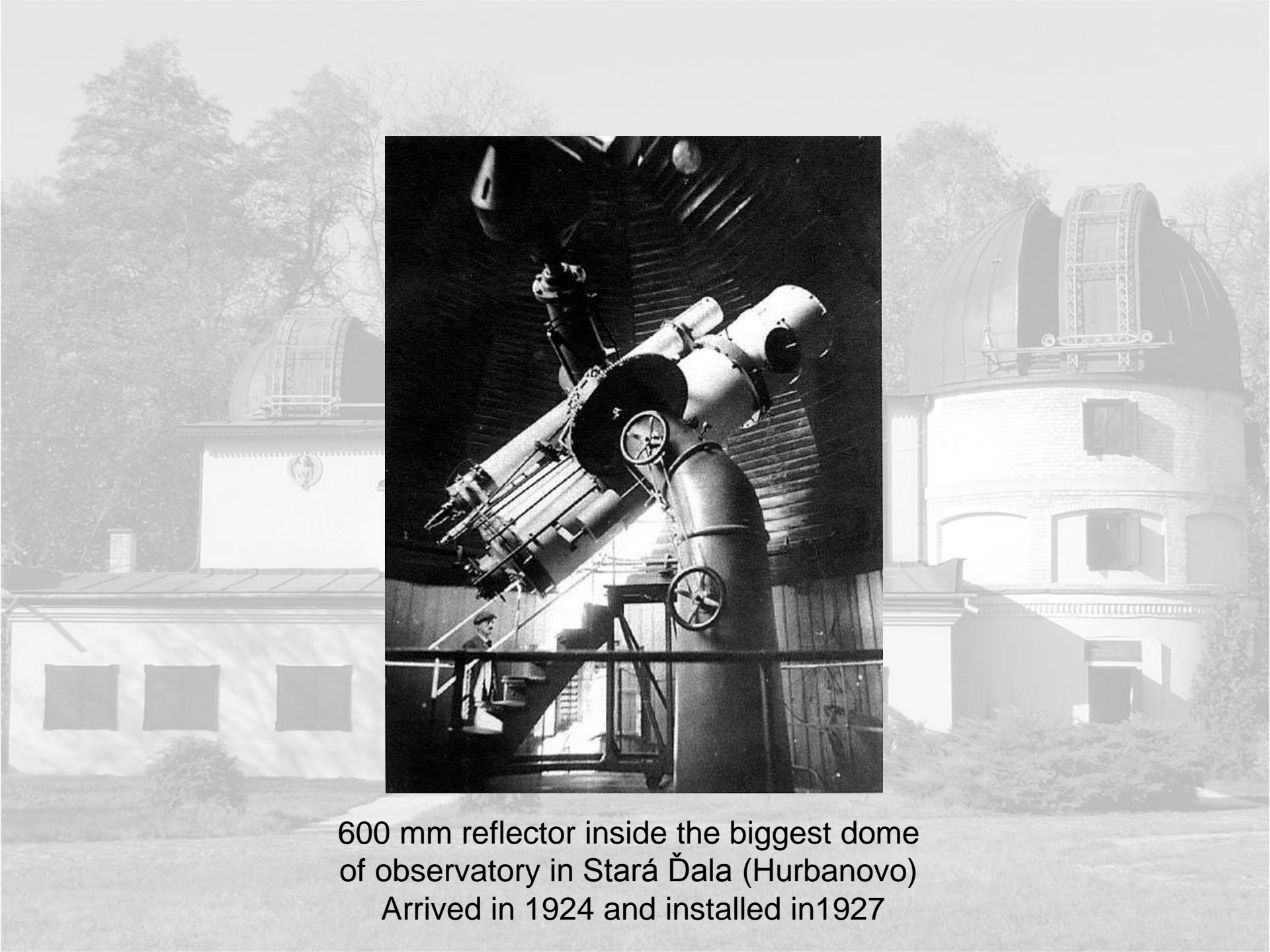
Dr. Arnošt Dittrich  
1878 - 1959





Dr. Bohumil Šternberk  
1897 - 1983





600 mm reflector inside the biggest dome  
of observatory in Stará Ďala (Hurbanovo)  
Arrived in 1924 and installed in 1927





Finsler comet

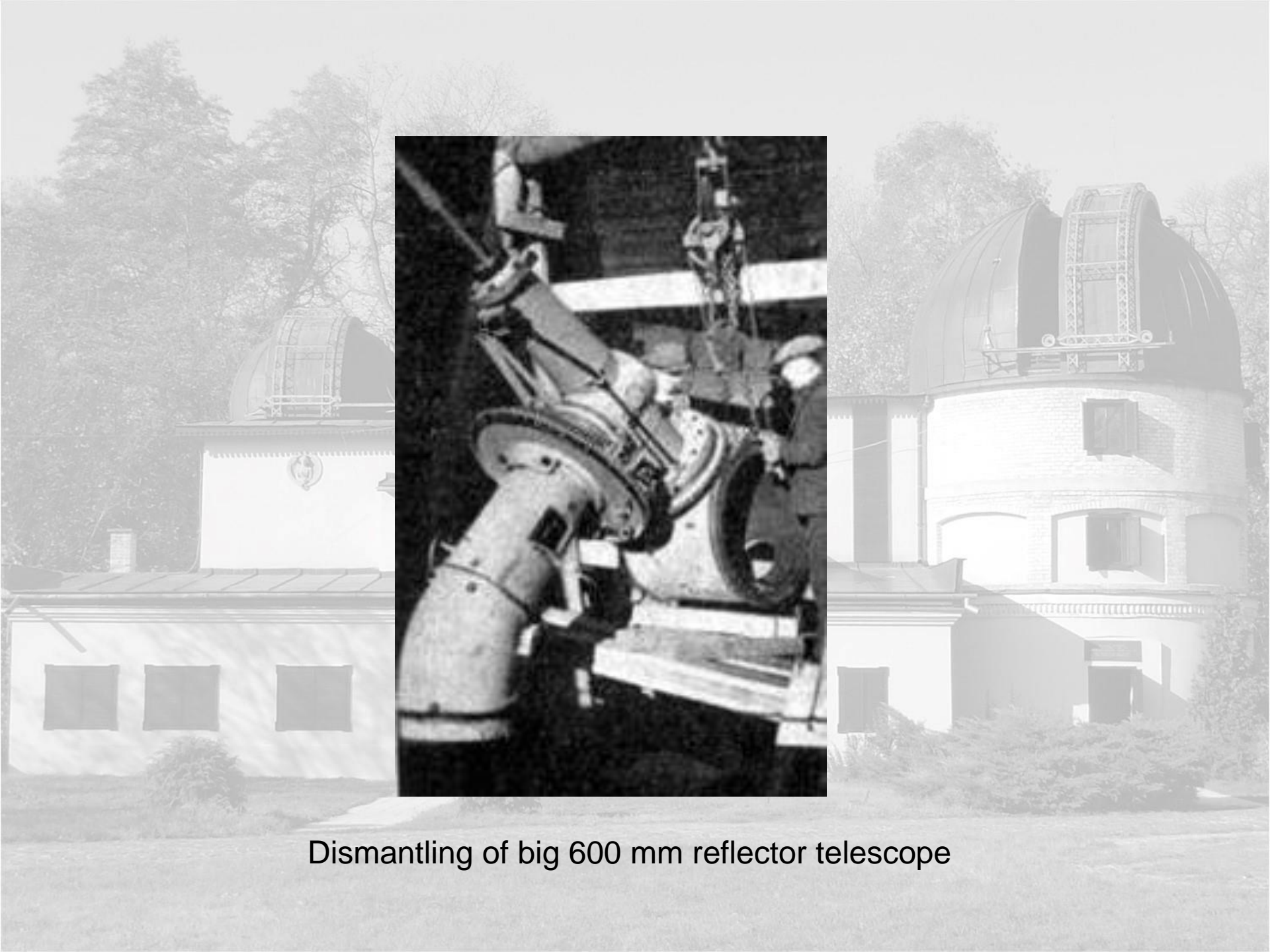


Spectrohelioscope  
1938



## The result of the Vienna Arbitration before II WW



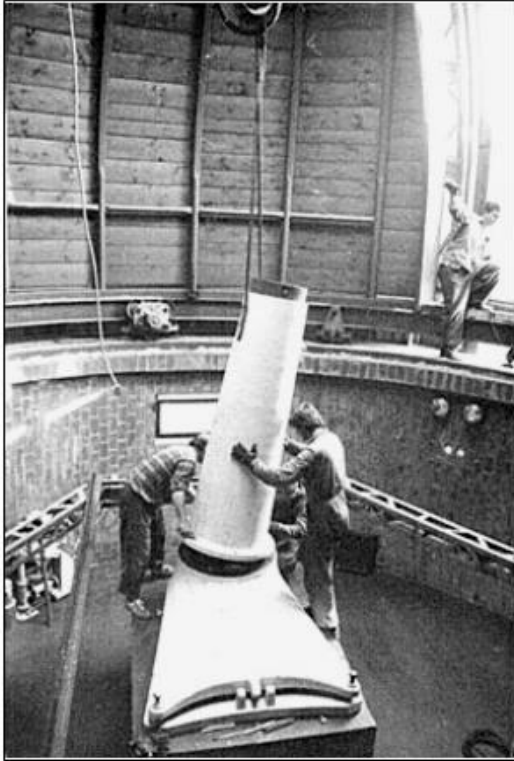


Dismantling of big 600 mm reflector telescope



# Observatory Skalná pleso





Assembling of 600 mm refractor in Univesity observatory in Modra





Small spectroscope at present time  
in the park of observatory in Hurbanovo reinstalled in 1969



Building of geophysics and meteorological observatory in Hurbanovo





***Present situation  
of astronomical observatory in Hurbanovo***

# The Observatory in Hurbanovo at the present time







Scientific research department:

Solar observations

Occultations

Meteor observations (radio meteors, fireballs)

Popularizing and educational department

Planetarium

Public observations

Camps for amateur astronomers

Vocational training on astronomy

Astronomy competitions

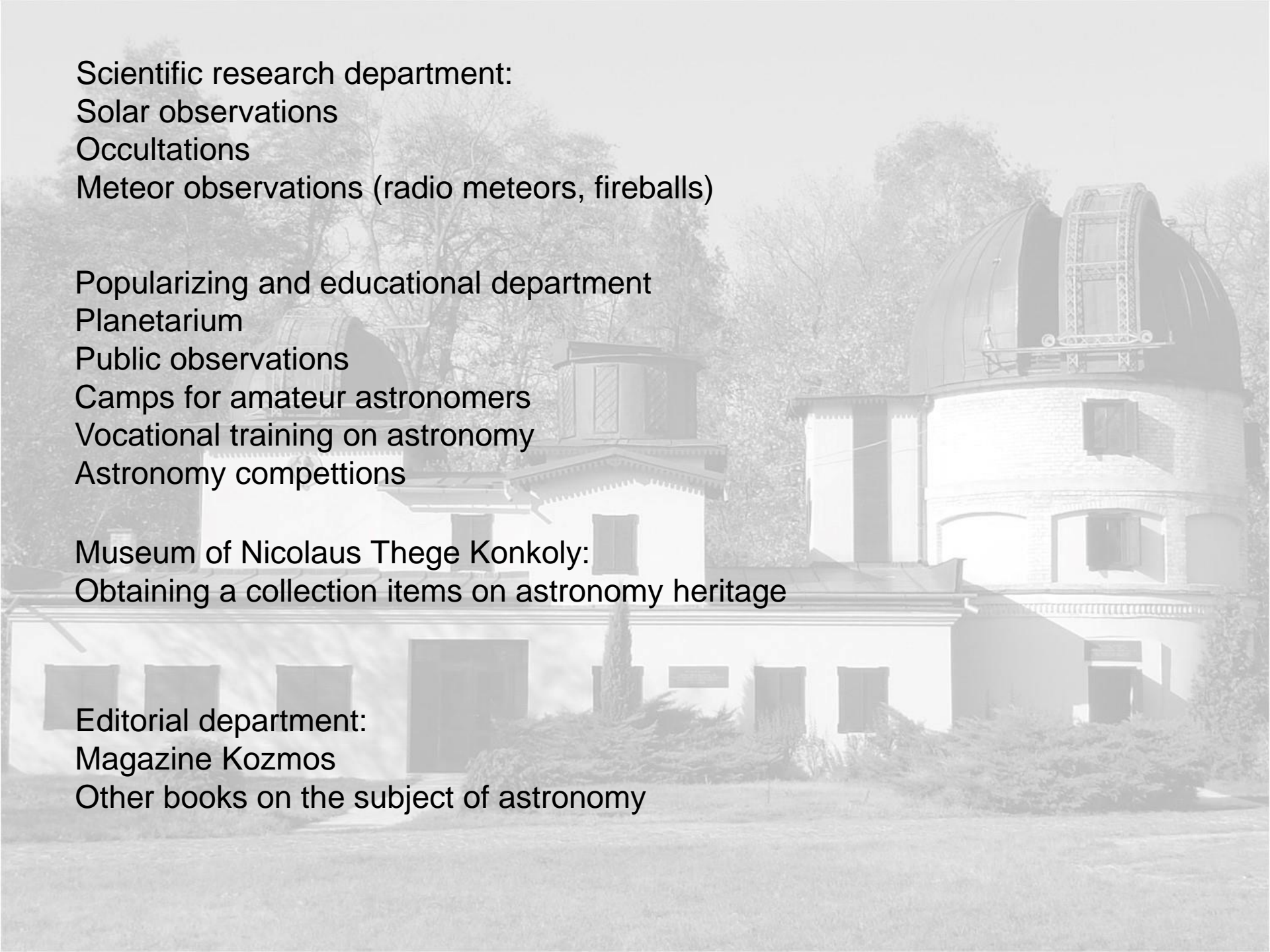
Museum of Nicolaus Thege Konkoly:

Obtaining a collection items on astronomy heritage

Editorial department:

Magazine Kozmos

Other books on the subject of astronomy





40 cm telescope inside the biggest dome of Historical building



# Helsospectrograph and coelostat





Heyde's dome





Small spectroscope reinstalled in park in 1969



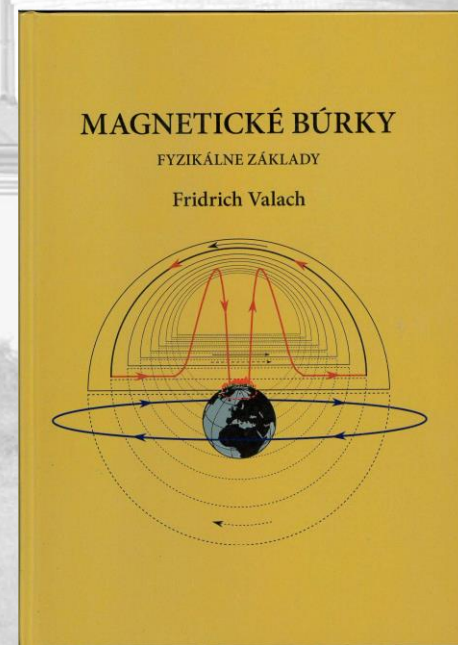
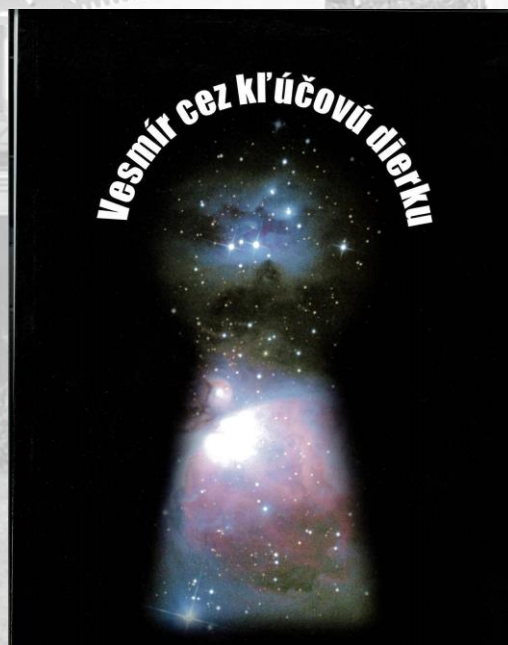
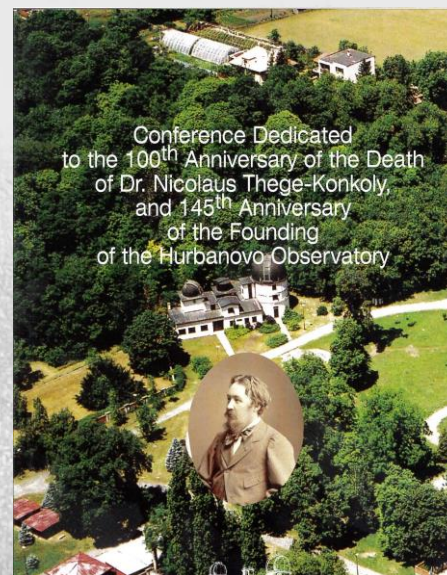
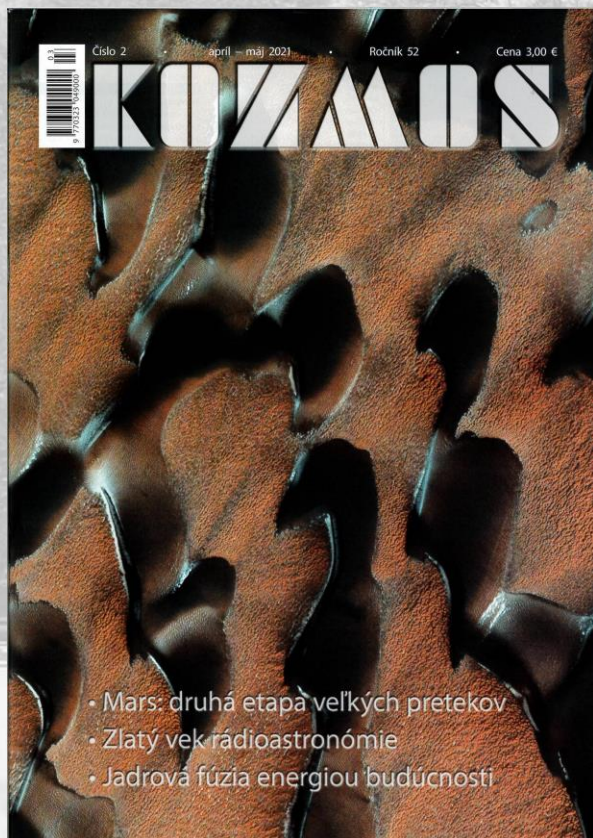


40 cm Celestron used for photometry





# Publication of Slovak Central Observatory





# Museum of Nicolaus Thege Konkoly





Planetarium ZKP 1 installed on 1983





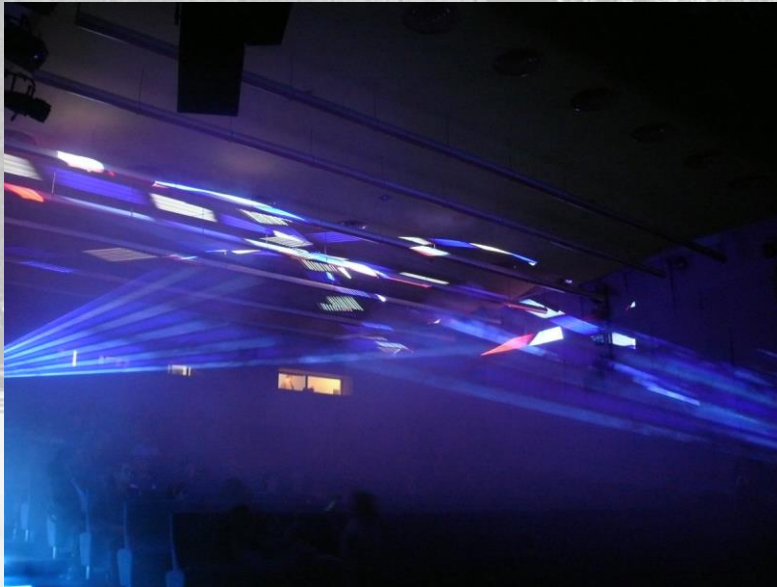
# Planetarium after restoring in 2015 with RSA Cosmos system



## Astronomical events

Astrofim festival

**ASTROFILM**





# Astronomical events

## Astronomical camps



Astronomical events

Workshops and seminars





## Astronomical events

### Painting and knowledge competitions





Astronomical events

Public observations







Thanks for your attention