

Acta Universitatis Palackianae Olomucensis. Facultas Rerum  
Naturalium. Mathematica-Physica-Chemica

---

Jaromír Široký

A contribution to the history of astronomy in Olomouc

*Acta Universitatis Palackianae Olomucensis. Facultas Rerum Naturalium. Mathematica-Physica-Chemica*, Vol. 12 (1972), No. 1, 335--340

Persistent URL: <http://dml.cz/dmlcz/119993>

**Terms of use:**

© Palacký University Olomouc, Faculty of Science, 1972

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

*Katedra teoretické fyziky a astronomie přírodovědecké fakulty  
Vedoucí katedry: prof. RNDr. Bedřich Havelka, doktor věd*

## A CONTRIBUTION TO THE HISTORY OF ASTRONOMY IN OLOMOUC

JAROMÍR ŠIROKÝ

(Received March 29th, 1971)

### Abstract

This paper contains a short history of astronomical activity at the Jesuit University (1573–1773) and the State University (1773–1860) in Olomouc. The university consisted of several colleges but since the second half of 19<sup>th</sup> century one after another was closed until finally no one was left with exception of the Faculty of Theology. After the World War II the University of Olomouc has been reestablished under the name Palacký University. There are now four faculties – Medicine, Natural Sciences, Philosophy and Pedagogy.

### 1. Introduction

Olomouc<sup>1)</sup> is first mentioned in Kosmas' Chronicle in 1055, but the town was founded some time before. Since the 9<sup>th</sup> century there had been Slav market village placed either on the present Cathedral stands or in the area or the later Hradisko Monastery. The castle of Přemyslid princes was founded after 1021. In the 12<sup>th</sup> century Olomouc was the centre of political and ecclesiastical power (the bishopric was founded in 1063), and also an important centre of trade and commerce; it lay on the trade path connecting Bohemia with Upper Silesia, Cracovia and Kiev Russia.

From the ecclesiastical school a second oldest university of Kingdom of Bohemia was founded in Olomouc in 1566. In 1573 emperor Maximilian II granted the school by the right to promote to all academical degrees, that were granted by West European and South European universities. Thus privileged the university has begun its activity in 1576. Its activity continued till 1860, when it was abolished by the Austrian government. In the publication „*Astronomy in Czechoslovakia*“ (Prague, 1967) which issued in the honour of 13<sup>th</sup> General Assembly of the International Astronomical Union, only a brief mention appeared of the existence of this university, which was renovated in 1946 under the name Palacký<sup>2)</sup> University in Olomouc.

<sup>1)</sup> In Czech Olomouc, in German Olmütz, in Polish Ołomuniec. – Olomouc in 1970 has 85,000 inhabitants.

<sup>2)</sup> František PALACKÝ (1798–1876), Czech historian and politician.

## 2. Professors of Natural Sciences at the University, from 1573 to 1860

The first professor of natural sciences was Theodor MORET (from Antwerp), who lectured in Olomouc from 1632 to 1635. His successors were Jiří BÖHM in 1652 and Valentin STANSEL (1621–1705) in 1655. Stansel's observations of the Moon were reviewed in the book *Propositiones selenographicae sive de Luna* (Olomucii, 1655), where the first map of Moon (in diameter 72 mm) ever made in the old Czech Kingdom was published. In the work *Legatus uranicus* (Prague, 1683) the comets are regarded as members of the solar system. Later he has written some writings in Portugal; he deceased in Bahia. In the years 1661–1663 there lectured Jan ZIMMERMANN and Sigismund Ferdinand HARTMANN (1632–1681), who was in Olomouc from 1664 to 1667 and later at the Prague University. In Prague Hartmann published an Aristotelian treatise on the comet which appeared in 1680 and whose tail was 80° long. According to Encke the period of this comet is 8,814 years. Jan HANKE [written also HANCKE (1644–1713)] who was in Olomouc from 1680 to 1705 was also chancellor of the university for several years. He was interested in the study of Sun and Moon eclipses. Jakub KRESA (1648–1715) was a professor of mathematics at the Prague University and in the years 1682–1684 in Olomouc. Afterwards he moved to Madrid, where he mainly lectured geometry. In Olomouc he educated a mathematician named Johannes Carolus Josephus TATELIUS, Silesius Oppoliensis, who published a writing, describing an eclipse of the Moon on 10 December 1685. After Kresa's departure from Olomouc and after the fire of the observatory in 1675, the interest in astronomical research is declining. At the beginning of the 18<sup>th</sup> century Kašpar PFLIGER from 1701 to 1702 and František TILLISCH from 1704 to 1705 were active in Olomouc. In 1773 emperor Maria Theresia changed the Jesuit University to State University. Professor of mathematics Štěpán SCHMIDT (1720–1783), 1761–1782, and professor of physics Jan DÜRNBACHER, 1764–1772, included astronomy into their lectures but on a philosophical basis. Just František Konrád BARTL (1750–1813) included in 1805 Newtonian celestial mechanics into his lectures. After the arrival of professor of mathematics Jakub Filip KULIK (1793–1863) the study of philosophy was extended to three years. In the last term he lectured spherical and theoretical astronomy, while the observations were carried out on the private observatory of Josef BAYER. In 1816 Kulik moved to Graz and in 1826 returned to Prague again.

The last period of astronomy at Olomouc University began in 1841 by Eduard knight of UNCKRECHTSBERG (1797–1870), who built a private observatory in 1845 and called to collaboration Jan B. Štěpán ŠIMKO (1785–1868), Rudolf BRESTEL, Jan SCHENK and Julius SCHMIDT (1825–1884) from Bonn. Schmidt was in Olomouc from 1852 to 1857 and afterwards he was a director of observatory in Athens. His numerous observations of the Moon, of zodiacal light and Sun-spots were published in many books and journals.

Unckrechtsberg in 1851 succeeded in including astronomy into educational plans of the university. With Friedrich FRANZ he lectured astronomy for three terms. He left Olomouc in 1867.

Note: After V. NEŠPOR [History of the Olomouc University, 1947] also astronomer Christian MAYER (1719–1793) was a member of the professorial university staff. However, latest investigations [MORAV, 1970] did not confirm this assumption.

### 3. Astronomy outside the University

Augustinus KAESENBROD from Všebrdy, called Olomuciensis (1467–1513) studied mathematics, astronomy and astrology under Jan HLOHOVSKÝ [Glogowczyk, Glogoviensis (1430–1507)] at Cracow University. In 1495 he published astronomical tables. Jan Friedrich BREINER [written also BREUNER (1583–1638)] was in Olomouc from 1614 to 1638. During his studies in Rome from 1610 to 1614 he was acquainted with Galileo Galilei, who allowed him to employ telescope. Karel SLAVÍČEK (1678–1735) was professor at the secondary school and at the university; his observations were published by P. Souciet in *Observations astronomiques*, Paris, 1729–1732. He died in Peking as a missionary. František ZENŮ (1734–1781) born in Olomouc, was in 1777 appointed director of Prague Observatory.

### 4. Astronomical monuments

The oldest astronomical monument is the remarkable astronomical clock (Orloj), which was probably constructed by clockmaker Antonín POHL in years 1420–1422, but the year of construction is not historically verified. The first mention is from 1529. Since that time it was renovated many times, last time after the World War II.

From the former Augustinian Monastery an astronomical globe is conserved with the inscription: A. M. D. G. Sphaere haec Anno 1695 perfecto pro Calculationis Sua Epocha respicit Annum Christi Millesimum septingentesimum.

Solar wall clock were often placed at churches, castles and on important buildings.

### 5. Palacký University, from 1946 to 1960

The renovated Palacký University had in the beginning 3 faculties; the first to begin its activity was the Faculty of Medicine, followed by the Faculty of Philosophy and the Pedagogical Faculty. According to the law from 1953 the Pedagogical Faculty was changed to High Pedagogical School with 2 faculties, i. e. Faculty of Social Science and Natural Sciences Faculty. After the government decision of 1958 the High Pedagogical School was abolished, existing faculties were fused with Palacký University. Thus Palacký University had 3 faculties — Medicine, Philosophy and Natural Sciences again. Since 1964 the Pedagogical Faculty was founded, which prepares teachers for basic schools.

The first professor of astronomy at Palacký University was Bohumil HACAR (\*1886), who lectured at pedagogical and natural sciences faculty from 1948 to 1958. He studied at the universities in Prague and in Vienna, where in 1911 acquired the title of doctor of philosophy. Then he taught at secondary schools in Moravia, since 1921 interested in study of variable stars either with his own telescopes or, after 1930 at the Observatory of J. J. Frič in Ondřejov (now Astronomical Institute of Czechoslovak Academy of Sciences). He published his works in different proceedings and journals, and since 1960, in *Acta Universitatis Palackianae Olomucensis*. The list of scientific publications of B. Hacar will be published in 1971. Besides his work as lecturer Hacar published textbooks (lecture notes) *Astronomy* (1952, 1955), *Theory of Astronomy Teaching* (1955) and textbook for university students *Introduction to General Astronomy* (Prague, 1963, 511, pp., in Czech).

At the department of algebra and geometry of the Faculty of Natural Sciences was from 1946 to 1964 Josef ŠIROKÝ (1893—1968), who published in Contributions from the Astronomical Institutes of the Masaryk University (now Purkyně University) in Brno several works dealing with theoretical astronomy. In the first named he simplified Wilkens's method of determination of orbits of a planet or a comet (1947), in the second he dealt with accuracy of determination of elements of a planetary orbit and in the third a more detailed study of the system of minor planet (1948)<sup>3)</sup>.

In 1960 a department of theoretical physics and astronomy within the Faculty of Natural Sciences was founded whose head is Professor Dr Bedřich HAVELKA DrSc. Lecture in fundamentals of astronomy, astrophysics and geophysics for students — future teachers of mathematics and physics at secondary schools are provided by the author of this article. Scientific papers are published in the „Acta Universitatis Palackianae Olomucensis — Facultas Rerum Naturalium“, founded in 1960.

#### 6. Astronomy outside University, from 1946 to 1960

After the World War II the Astronomical Society was founded in Olomouc, which in 1959 has become a branch of Czechoslovak Astronomical Society. The Society in Olomouc was headed by Vladimír PETR (\*1900), whose merit lies in building a Public Observatory at south-west outskirts of the town in 1955. The principal instrument of the Observatory is a 60 cm reflector, among other instruments a 20 cm refractor and coronagraph are worth mentioning. Petr was director of observatory till 1956, succeeded by Jan LUNER (\*1917) till now<sup>4)</sup>. The observatory is concerned with observations of Sun, occultations of stars by the Moon, and serves to pedagogical work and adult education.

#### 7. Conclusion

Astronomy at Jesuit University (till 1773) was a part of theology teaching; later efforts for introduction of lectures had only limited existence, mostly because of early departure of professors. That is why it could not be compared with Charles University in Prague, whose astronomical traditions are much richer. However, we meet a number of astronomers that were in connection with numerous European research workers and universities; they moved either to these universities as teachers or to some observatories as research workers. In Olomouc too, there had been a number of observatories which were successively abolished.

#### 8. Acknowledgements

I should like to express my best thanks to Prof. Dr B. Hacar and Prof. Dr B. Havelka DrSc. for many valuable suggestions.

<sup>3)</sup> See also: *Heinrich W. W.*, 1955, *Bull. Astr. inst. Csl.*, 6, No 3, 59—61: Progress of Czechoslovak Astronomy from 1945—55, *Celestial Mechanics*.

<sup>4)</sup> RNDr. Jan Luner suddenly deceased on 27 March 1972.

#### REFERENCES

- Kouřil M.*, 1966, *Střední Morava*, 1, 74.  
*Machyška L.*, 1967, *Olomouc*, 12 pp.  
*Monav K.*, 1965, *Kosmické rozhledy*, 3, 119.  
—, 1966, *Říše hvězd*, 47, 193.  
—, 1970, *Říše hvězd*, 51, 89.  
*Nešpor V.*, 1947, *Dějiny university olomoucké*, 223 pp.  
*Remes M.*, 1960, *Acta Univ. Palackianae Olom.*, 3, 65.  
*Široký Jar.*, 1969, *Bull. Astr. inst. Csl.* 20, 38.  
—, 1971, *Acta Univ. Palackianae Olom.*, 33 (in print).

#### APPENDIX

Some of scientific papers:

1. STANSEL, Valentin
  - *Phenomena coelestis, sive disertatio astronomica de tribus cometis, qui proximis annis in caelo apparuerunt* (1668).
  - *Legatus uranicus ex orbe novo in veterem, id est observationes americanae cometae, qui A. 1664 in asterismo corvi Mundo illuxit, observatus in Brasiliae Bahiae omnium Sanctorum, qui cum auctario observationum Europeanum a Mathesi Pragensi prodiit* (1683).
  - *Uranophilus coelestis peregrinus, sive mentis uranicae per mundum siderum peregrinantis extases* (1685).
2. HANKE, Jan
  - *Praedictio astronomica solaris deliquii ad annum 1681, 12 Julii* (1683).
  - *Horologium nocturnum magneticum ad elevationem poli Olomucensem, Pragensem et Wratislaviensem* (1683).
3. KRESA, Jakub
  - *Analysis speciosa trigonometricae sphaericae* (1720).
4. TATELIUS, Johannes
  - *Gemmula mathematica, sive Ars liberalis, quam Astronomia in alma . . . universitate olomucensi, Soc. Jesu, praeside reverendo ac doctissimo patre Jacobo Kresa, professore publico ac ordinario tradita, ad solis et lunae divinanda deliquia rex canones exhibet*.
5. HÁČAR, Bohumil
  - *Observation d'étoiles variables: SS Gem, V UMi,  $\gamma$  Cyg (1927), RV Tau, Y Cyg (1929), SZ Aql (1932), RR Lyr (1937), XX Cyg (1940).*
  - *On the Relation between Range of Spectrum and Range of Light on the Cepheid Variables* (1951).
  - *Observations of the Stars: XX Cyg (1951), U Cep (1960), RW Cas (1964), Y Aur (1965).*
  - *Die Beziehung Masse - Leuchtkraft von Paul Baize und ihre Anwendung zur Parallaxenbestimmung der Bedeckungsvariablen* (1968).
6. ŠIROKÝ, Josef
  - *On the Wilkens's Method Concerning the Determination of the Orbit of a Planet or a Comet* (1947).
  - *On the System of Minor Planets* (1948).
  - *On the Accuracy of the Determination of the Elements of a Planetary Orbit* (1948).

#### SHRNUTÍ

### PŘÍSPĚVEK K DĚJINÁM ASTRONOMIE V OLOMOUCI

JAROMÍR ŠIROKÝ

V práci je podán přehled učitelů přírodních věd, kteří měli vztah k astronomii — jednak na jesuitské universitě v letech 1573 až 1773, jednak po zestátnění

university v r. 1773 až do jejího zániku v r. 1860. Významným profesorem byl V. Stansel, který vydal v r. 1655 první mapu Měsíce v Českém království. S. F. Hartmann uveřejnil aristotelovské pojednání o kometě z r. 1680. V letech 1682 až 1684 působil na olomoucké universitě matematik Jakub Kresa, nar. se Smržicích u Prostějova. Začátkem 19. století zařadil F. K. Bartl do přednášek Newtonovu nebeskou mechaniku. V posledním období je významným učitelem Eduard kníže z Unkrechtsbergu, který v r. 1845 si vybudoval soukromou hvězdárnu a v r. 1851 zařadil astronomii do svých přednášek. Ke spolupráci pozval Julia Schmidta z Bonnu, který se později, jako ředitel hvězdárny v Athénách, zabýval hlavně studiem Měsíce a Slunce; v r. 1876 objevil novu v souhvězdí Labutě.

Po obnově university v Olomouci v r. 1946 konal v letech 1948 až 1958 přednášky z astronomie na pedagogické fakultě University Palackého doc. dr. Bohumil Hačar (nar. 1886), který se zabývá studiem proměnných hvězd a teorií vyučování astronomii. Na katedře matematiky působil v letech 1946 až 1964 doc. dr. Josef Široký (1893–1968), který uveřejnil několik prací z teoretické astronomie (výpočty drah planet a komet, soustava planetek). Po 2. světové válce byla v Olomouci vybudována hvězdárna zásluhou Vladimíra Petra, který také založil Astronomickou společnost v Olomouci.

#### РЕЗЮМЕ

### ПРИМЕЧАНИЕ К ИСТОРИИ АСТРОНОМИИ В ОЛОМОУЦЕ

#### ПРОФИЛ ШИРОКИ

В предлагаемой работе описывается развитие астрономии в г. Оломоуц; в этом городе возник второй наиболее старинный университет в чешском государстве. Множество профессоров университета постепенно работало в зарубежных университетах или астрономических обсерваториях. Первую карту Луны в чешском государстве сделал В. Стансел в 1655 г. в городе Оломоуц. Лекции по астрономии читал регулярно Ф. К. Бартл в начале XIX века. В 1845 г. Эдуард князь Ункрехтсберг построил частную обсерваторию и с 1851 г. он читал лекции по астрономии. В Оломоуце работал Ю. Ф. Шмидт (1825—1884), который был избран позже директором обсерватории в Афинах (Греция).

После второй мировой войны был снова создан в Оломоуце университет им. Палацкого. Лекции по астрономии читал на педагогическом факультете доц. д-р Богумил Гацар (род. в 1886 г.), который занимается изучением переменных звезд и теорией преподавания астрономии. На кафедре математики работал доц. д-р Йосеф Широки (1893—1968), который занимался небесной механикой (определением орбит планет и комет, системой малых планет). В 1955 г. создал Владимир Петр обсерваторию и Астрономическое общество. В приложении мы приводим список важнейших научных работ астрономов, работающих в Оломоуце.