

From Quadrivium to Natural Sciences: New Impulses in the Traditional Framework

Conference at the
University of Ostrava
15th – 16th November 2018







CONTENT

Welcoming Words	3
Program of the Conference	4
Book of Abstracts	5
Conference Venue	24
List of Participants	25
Steering committee:	26

WELCOMING WORDS

We cordially welcome you in Ostrava at the conference "From Quadrivium to Natural Sciences: New Impulses in the Traditional Framework".

The aim of our gathering is to discuss broad and diverse topic of quadrivial disciplines, their place in the hierarchy of human knowledge and the roles they fulfilled throughout several centuries. We are, therefore, very happy to create a unique opportunity for various scholars to meet and share results of their research with their colleagues. It is a pleasant surprise to us that our call for papers sparked such an interest in many philosophers and historians from whole Europe and beyond. We find this fact particularly fitting to the theme of our conference.

The topics we will explore together over the course of two days include optics and sensory perception, astronomical and astrological treatises, general issues of human knowledge and the relation between human and nature in many forms. The geographical scope of the conference also extends the borders of Latin philosophy and science to cover the foreign impulses that helped to reshape quadrivium into natural sciences.

Once again, we welcome you in the Czech Republic, the city of Ostrava and the University of Ostrava. We hope you have an enjoyable stay and fruitful discussions!

Steering committee:

David Černín, Lukáš Lička, Tomáš Nejeschleba, Marek Otisk

PROGRAM OF THE CONFERENCE

	15 th November				
9:00	Registration begins				
9:30	Opening (Michaela Závodná, Tomáš Nejeschleba)				
	Session 1 – Optics: Light & Sensory Perception (Chair: David Černín)				
9:45	Jari Kaukua	Empiricism in Islamic Philosophy, or the Question of Ibn al-Haytham's Influence on and after Ibn Sīnā			
10:35	Coffee Break				
10:50	Mattia Mantovani	"The only sense with a science of its own"; Roger Bacon on Perspectiva			
11:25	Lukáš Lička	From Optics to Practical Geometry: On Perspectiva Ascribed to Thomas Bradwardine in Vat. lat. 3102			
12:00	Martin Žemla	Marsilio Ficino's Allegorical Reading of Natural Phenomena			
12:35	Lunch Break				
Session 2 – Stars & Nature (Chair: Tomáš Nejeschleba)					
14:00	Ovanes Akopyan	Renaissance Theories of Tides (ca. 1450–1600): From the Medieval Framework to Galileo			
14:50	Marek Otisk	Gerbert of Aurillac and Table of Climate for Timekeeping			
15:25	Olga Chadaeva	Cosmological, Astronomical, Astrological Elements in Sermons of Ruthenian Authors of the 17 th Century			
16:00	Coffee Break				
16:30	Athanasios Rinotas Albertus Magnus's Alchemy: Ars, Scientia or Scientia Media?				
17:05	Alexandra Petáková Knowledge over Method: Nicole Oresme's Reclassification of the Disciplines of Astrology				
17:40	Zdeněk Žalud	Jean Baptiste Morin and the Reform of Astrology at the Turn of 16th to the 17th Century			
18:15	Afterparty				

	16 th November						
	Session 3 – Discussing Knowledge (Chair: Jan Čížek)						
10:00	Crina Galiță The Status of Quadrivium in the Corpus on Logic of the Brethren of Purity (lḫwān aṣ-Ṣafā')						
10:35	Jana Tomešová	Other within the Other: Limits of Philosophy in Judaism (Case of Anonymous Letter Against Philosophy, MS Opp. 585)					
11:10	Jakub Varga	Can a Non-existent Proposition be True? A Late Medieval Dispute about the Truth of Non-existent Sentences					
11:45	Lunch Break						
Session 4 – Nature & Humans: New Challenges (Chair: Lukáš Lička)							
13.30	Pilar Herráiz Oliva,	The Genesis of the Specialisation of the Sciences: Botany as a New Field of Knowledge in the 13th Century					
	Mustafa Yavuz	The deflests of the specialisation of the sciences. Butting as a New Field of Knowledge in the 15th century					
14:05	Tomáš Nejeschleba	Renaissance Anatomy: A Path from ars to scientia					
14:40	Jan Čížek	Johann Heinrich Alsted's Physica Mosaica: Cul-de-sac of the Premodern Natural Philosophy?					
15:15	Coffee Break						
15:45	Petr Pavlas	A Trivial-Quadrivial Mixture: Combinatorial Mathematics and the Language Planning from Cardano to Comenius					
16:20	Daniel Špelda	Huygens and Fontenelle on Scientific Curiosity: From Vice to Virtue					
16:55	Kateřina Lochmanov	á Analysis situs between Newton and Monadology					
17:30	Conference ends						

BOOK OF ABSTRACTS

Ovanes Akopyan

Renaissance Theories of Tides (ca. 1450–1600): From the Medieval Framework to Galileo

Widely debated in the middle ages, the origin of tidal motions remained an unsolved problem until the early modern times. There was no consensus among medieval scholars on what provoked the flow and ebb, while two of the three most diffused theories had dated back to Abu Ma'shar astrological opus magnum, the Liber introductorii maioris ad scientiam iudiciorum astrorum. Starting from the fifteenth century, due to the revival of numerous ancient philosophical texts, on the one hand, and the crisis of the traditional Aristotelian natural philosophical framework, on the other, many new interpretations for tidal motions were put forth. As we will see, these interpretations, often contradictory and based mainly on philosophical premises, formed the basis for what is now known as two most famous early modern interpretations of tides, these by Galileo Galilei and Isaac Newton.

Thus, the present paper will examine the large-scale discussions that preceded Galileo's famous interpretation of tides in the *Dialogue* Concerning the Two Chief World Systems, completed in 1632, and, therefore, are to be considered as its precursors.

Olga Chadaeva

Cosmological, astronomical, astrological elements in sermons of Ruthenian authors of the seventeenth century

The oral preaching practice and the development of the genre of sermon in the Orthodox Church of the seventeenth century was brought by Ruthenian authors, influenced by Polish and Latin tradition. Such intellectuals as Ioannikiy Galyatovsky, Lazar Baranovich and Simeon Polotsky incorporated their general knowledge of astronomy, cosmology, astrology, mostly excerpted from Latin sources, into their books of sermons. The functions and methods of inclusion of particular "scientific" elements varied in different authors, however, they shared certain concepts common to both scholastic thought and baroque aesthetics. The most branched cosmological descriptions and metaphors are presented by Galyatovsky, who also connected the cosmological and astronomical imagery with the veneration of Virgin Mary. Sermons of Lazar Baranovich are notable for their use of the zodiac symbolism, while Simeon Polotsky, being aware of the sensitivity of Muscovite society towards any novelties, added cosmological elements cautiously, mostly referring to the Bible and sometimes to Pythagorean symbolism of the four elements. The sermons of the Ruthenian authors were not primarily focusing on the issues of cosmology, astronomy and astrology and added these elements mostly as parts of rhetoric constructions. However, despite being considerably distant from the 17th century thoughts on the Universe, they also may be perceived as a step towards occidentalisation and secularisation of the Russian culture.

Jan Čížek

Johann Heinrich Alsted's Physica Mosaica: Cul-de-sac of the Premodern Natural Philosophy?

Among other things, the Reformation has led to an increased emphasis on Biblical authority not only in theology, but also in other fields of human intellectual activity. One of the instances was also the natural philosophy: Some early modern scholars believed that the Scripture provided more certain knowledge than all secular authorities (namely Aristotle) or the investigation of nature as such. In my paper, I will present a case-study of Mosaic philosophy proposed by Reformed encyclopaedist Johann Heinrich Alsted (1588–1638) who began his studies with natural philosophy derived from Biblical principles and subsequently tried to rebuild the whole of philosophy on Mosaic basis – a task to which he devoted a monumental encyclopaedic work *Triumphus bibliorum sacrorum* (1625). I will argue, however, that Alsted's spectacular conception was a cul-de-sac rather than a viable and promising project from the point of view of the history of modern science.

Crina Galiță

The status of quadrivium in the corpus on logic of the Brethren of Purity (Iḥwān aṣ-Ṣafā')

The first part of the presentation will focus on explaining both the role of the Brethren of Purity in the classical Arabic philosophy and that of their importance in the medieval literature related to the Arabic intellectual history. Consequently, we will underline the importance of their corpus on logic present in the first section ar-[Epistles On mathematics] from rasā'ilu r-rivādivvatu encyclopaedia Rasā'il [The Epistles], that contains five epistles. The last of the epistles, namely Fī ma'nā 'Anālūṭīqā t-tāniyati [On the sense of the Second Analytics], was transferred to Medieval Europe and attributed to al-Kindī1 or to al-Fārābī, after having been translated into Latin, namely Liber introductorius in artem logicae demonstrationis. Secondly, we will analyse the status of quadrivium in the exemples found in the argumentation principles given by the Iḥwān aṣ-Ṣafā' in the epistles On logic. Therefore, we will describe the nature of quadrivium in relation to logic, one of the trivium disciplines. By offering exemples from the original Arabic text we will exemplify the connexion between each of these quadrivial disciplines for the four types of methods of demonstration used by the Brethren of Purity, namely division, analysis, definition and demonstration.

Thirdly we will formulate a scheme that describes the existing relationship between the two axes of thinking, the quadrivium and the trivium, in order to elaborate a view on the status of quadrivium in relation to logic. We will then underline how this scheme contributes to a description of the faultlessness knowledge, in the view of the Brethren of Purity.

Jari Kaukua

Empiricism in Islamic Philosophy, or the Question of Ibn al-Haytham's Influence on and after Ibn Sīnā

In a controversial recent paper, Dimitri Gutas argues that Ibn Sīnā's (d. 1037 CE) Peripatetic theory of science was an instance of fullblown Lockean empiricism, some seven hundred years avant la lettre. Although I do not endorse Gutas' claim, in this paper I want to look at another, arguably more genuinely empiricist strand in Islamic philosophy and theology, namely that initiated by Ibn al-Haytham's (d. 1040 CE) revolutionary theory of vision. After a quick glance at the philosophically most interesting aspects of the theory, I move on to briefly discuss traces of related ideas in Ibn Sīnā's roughly contemporaneous theory of perception. The major part of the paper is, however, devoted to an investigation of the neo-Ash arite theologian Fakhr al-Dīn al-Rāzī's (d. 1210 CE) critique of Avicennian theory of science, with an especial view to assess another controversial claim made by Bilal Ibrahim, according to whom Rāzī's critique was to a large part motivated by Ibn al-Haytham's theory of vision.

Literature

Gutas, Dimitri 2012. 'The Empiricism of Avicenna'. Oriens 40/2: 391-436.

Ibrahim, Bilal 2013. 'Faḥr al-Dīn al-Rāzī, Ibn al-Haytam and Aristotelian Science: Essentialism versus Phenomenalism in Post-Classical Islamic Thought'. *Oriens* 41/3-4: 379-431.

Lukáš Lička

From Optics to Practical Geometry: On *Perspectiva* Ascribed to Thomas Bradwardine in Vat. lat. 3102

During the last two centuries, a brief text called "Perspectiva" that was ascribed to Thomas Bradwardine (c. 1300–1349) by the copyist responsible for the codex Vat. lat. 3102 has been mentioned by several prominent scholars (e.g., M. Curtze and D. C. Lindberg); however, this has been done without a closer inspection of its content. The present paper is intended to fill this little gap in our knowledge of medieval science. First, it explains why the treatise is called perspectiva, and yet it includes material connected rather with trigonometry: it is argued that it is actually a fragment of a full-fledged early 14th-century optical textbook with incipit "Perspectiva cum sit una", which is preserved in three other manuscripts and hitherto unnoticed by historians of optics. Second, it focuses on the contents of the Vatican fragment, investigates the notion of shadow – used both by optics and practical geometry -, and singles out Practica quadrantis by Campanus of Novara as the source of the Vatican fragment, Finally, several surmises regarding the author and the date of composition of not only the Vatican fragment, but also of Perspectiva cum sit una are presented.

Kateřina Lochmanová

Analysis Situs between Newton and Monadology

In this contribution I explain the way a modern-age German philosopher Gottfried Wilhelm Leibniz attempted to supplement Newtonian physics with his own monadological metaphysics of space by means of a geometric discipline called *analysis situs*. Since Leibniz' theory of 'doorless and windowless' monads has been dismissed by many scientists for its absurdity, he has been much more appreciated owing to his alleged relational conception of space and topology. However, in this contribution I try to trace the original aspects of Leibniz' situational geometry along with its genuine, not merely supposed merit for science.

Leibniz' dissociation from the increasingly popular Christian-Cartesian dualism, coupled with his rejection and at the same time an attempt to fundamentally improve Cartesian algebra is interpreted as a first step towards a truly formal science, either in terms of the substantial forms by Aristotle, or literally, the form being identified with shape. Regarding the substantive forms, Leibniz created conditions for them as early as in 1670, and regarding the formal geometry, Leibniz himself considered it completed in 1679. Meanwhile he proclaimed the production of motion through motion itself, which no longer operates with geometrical figures, but with forces and their effects, as the highest geometrical level. It was as early as in 1671, before he went to Paris, got to know higher mathematics and algebra, read writings by projective geometers, devoted himself to physics and studied Euclid more thoroughly. Leibniz' own metaphysics of space, as we know it from the 47th paragraph of the fifth letter to Clarke, thus originated much earlier, under different circumstances and not in order to reject the Newtonian, but Cartesian conception of space.

Mattia Mantovani

"The only sense with a science of its own" Roger Bacon on *Perspectiva*

Roger Bacon's call for a reform of the medieval university curriculum and his ambitions to provide an encyclopedic survey of the state of knowledge in his time are well-known. The classification of the sciences was clearly enough vital to this project, intended as it was to provide the general framework wherein any future research was to be carried out. Bacon's claim that there are nine "natural sciences" starting with perspectiva and culminating in scientia experimentalis was especially important under this regard. In my presentation I will study Bacon's arguments for classifying perspectiva – namely, optics - as "the first of all natural sciences", and the one from which any investigation into nature is to start. I will show that this claim is based on Bacon's overall theory of perception, according to which whereas that which is perceived by the other sense-modalities is "common to beasts" and human beings, there is something specifically and truly non-brutish in the act of perception through vision – a fact which causes this sense to "attain the dignity of human reason" and makes it worth studying. As I will show in my talk, the later addition of perspectiva to the sciences of the Quadrivium is indeed largely the result of Bacon's crucial (albeit virtually neglected) thesis that, of all the senses, vision is "the only one with a science of its own".

Tomáš Nejeschleba

Renaissance Anatomy: The Path from ars to Scientia

Anatomy was traditionally labeled as *techné*, *ars anatomica*, i.e. a practical skill, an art on how to dissect human or animal bodies. This designation remained in the Renaissance but the status of anatomy was changing along with the growing significance of anatomy within medicine. This shift is connected with changes in the view of medicine in general and discussions about the issue as to whether medicine is merely the art of curing or if it also provides knowledge (*scientia*). In connection with methodological issues and natural philosophy, anatomy begins to be labeled as science or knowledge (*scientia anatomica*) in the seventeenth century. The paper focuses on late Renaissance concepts of anatomy. Changes in the understanding of anatomy will be discussed by means of the works of the leading anatomists of the given period: Andreas Vesalius, Realdo Colombo, Gabriele Fallopio, and Girolamo Fabrici ab Aquapendente.

Pilar Herráiz Oliva & Mustafa Yavuz

The genesis of the specialisation of the sciences: botany as a new field of knowledge in the thirteenth century

The reception of the translations of the works of Aristotle at the University of Paris in the thirteenth century promoted a new understanding of the sciences as specialised fields of knowledge. The huge amount of translations required a new organisation of knowledge, which included novel subjects and categories. This had, as a result, a progressive abandonment of the trivium and the quadrivium, which can be seen in the new curriculum at the University of Paris which has survived in MS. Ripoll 109, Archivo de la Corona de Aragón.

Both Aristotelian and pseudo-Aristotelian works were translated. Among these there is a very special case, namely the pseudo-Aristotelian *De plantis*, translated from Arabic into Latin and then back into Greek. *De Plantis* was included in the new curriculum in Ripoll 109, and constituted the main source for botanical studies until the sixteenth century. Its popularity in the Middle Ages can be seen from its 158 surviving copies. Throughout this paper we will explore the reception and impact of the *De Plantis* in both the Islamicate World and the Latin Western tradition. We aim to show its foundational role in the development of empirical investigation and of botany as a new discipline within the natural sciences.

Marek Otisk

Gerbert of Aurillac and Table of Climate for Timekeeping

This paper tries to solve the question why did Gerbert of Aurillac in his brief letter to brother Adam (written in 989) elaborate a table for climate (horology) where the longest day of the year reaches 18 hours. The standard summaries of climates, available during Gerbert's time, did not mention such climate. This text wants to argue, that Gerbert added this table to his letter because the table of clime with 18 hours solstitial day (similarly like the second added table for the climate of Hellespont) is an exemplary guideline according to which Adam can make his own horologies. Gerbert used this extraordinary climate as a suitable explanatory example due to its mathematical simplicity appropriate demonstrating the astronomical theory of yearly Sun movement.

Petr Pavlas

A Trivial-Quadrivial Mixture: Combinatorial Mathematics and the Language Planning from Cardano to Comenius

From its beginnings, the language planning is tightly connected with combinatorics. The first thinker who created a sort of combinatorial universal alphabet was Raymond Lull, although it is possible to trace his precursors in Jewish cabbalism. In Jan Amos Comenius's intellectual cradle, namely in Herborn, Lullism was very much favoured thanks to the popular Lazarus Zetzner's Strasbourg edition of Lull's works and due to the early Johann Heinrich Alsted's Lullist writings like Clavis Artis Lullianae (1609), Panacea philosophica (1610), Systema mnemonicum (1610), Trigae canonicae (1612) and Philosophia dignè restituta (1612). Johann Heinrich Bisterfeld, Comenius's follower and Alsted's son-in-law, was also interested in ars Lulliana and, furthermore, his system of science with its precise definitions of concepts and its emphasis on the value of ars combinatoria later deeply influenced Gottfried Wilhelm Leibniz. Surprisingly enough, combinatorial ideas as a potential means for the construction of the new, "real" language (lingua realis) came to Comenius's mind neither through the direct reading of Lull's Opera nor via his teacher Alsted nor his younger colleague Bisterfeld. Thus, it is necessary to look for the roots of Comenius's combinatorial ideas into the tradition represented by Cardano, Clavius, Schwenter, Guldin, and – as Comenius's direct source – Marin Mersenne.

Alexandra Petáková

Knowledge over Method: Nicole Oresme's Reclassification of the Disciplines of Astrology

Nicole Oresme, a 14th century French scholar, was one of the most vocal medieval critics of astrology. In his numerous treatises on the subject, he endeavoured to create a complex and definitive rebuttal of the basic principles of astrology so that its predictions would be separated from astronomy and the quadrivium. Part of that effort was to define and classify astrology in order to determine which of its disciplines were supported by solid theory and methods (in other words, which could be considered a part of "astronomy" in the modern sense) and which could not base their results on scientific ground. For that purpose, Oresme created his own classification of astronomy and astrology that differed from the hierarchy used by the practicing astrologers of his time. The presentation will introduce Oresme's classification, as well as compare it with that used in Guido Bonatti's popular Liber astronomiae. While Bonatti's classification is based on the subject of each discipline and its methods, Oresme built his hierarchy on the accuracy and attainability of knowledge. This not only resulted in a deviation from astrological practice, but also led Oresme to divide astronomy into three separate sciences: mathematical astronomy, natural philosophy, and astrology.

Athanasios Rinotas

Albertus Magnus's Alchemy: Ars, Scientia or Scientia Media?

In the *De Mineralibus* Albertus tends to repeat that alchemy is the art that imitates nature best. However, in this paper, I intend to challenge this position by showing that Albertus had a higher appreciation of alchemy shown in an indirect way.

In order to do so I will show first Albertus's notion and approach on ars and scientia and how these two were influenced by the epistemological works of Al Farabi, Avicenna and Gundissalinus. Afterwards, I will show Albertus's direct quotes regarding the epistemological status of alchemy as it is explicitly shown in the *De mineralibus*. Finally, I will challenge this position by showing that a) Albertus's alchemy adopts and uses the methodology of scientia as it is described in his other natural works and b) that he creates strong ties with astronomia and astrologia which were considered to be a scientia media (i.e the focus will be on the first one).

As a conclusion I will claim that Albertus did not have a fixed and coherent view regarding the exact epistemological status of alchemy, something which will also be justified through his alchemical references that follow the *De mineralibus*.

Daniel Špelda

Huygens and Fontenelle on scientific curiosity: From vice to virtue

In my paper, I want to deal with the theme of scientific curiosity in Huygens' and Fontenelle's books on the plurality of inhabited worlds. Recent scholarship (H. Blumenberg, L. Daston, P. Harrison et al.) presented and explained the process of legitimization of scientific curiosity in early modern thought - especially in the first half of the seventeenth century and often focusing on Bacon. In my opinion, evaluation of scientific curiosity in the second half of seventeenth century did not attract so much scholarly attention. I want to show that Christiaan Huygens in Cosmotheoros (1698) and Bernard de Fontenelle in his Entretiens sur la pluralité des mondes (1686) understand scientific curiosity neither as traditional critics of curiosity (e. g. Augustine) nor as its early modern defenders such as Francis Bacon. I would like to show two differences: 1) While the earlier authors understood scientific curiosity as vice resulting from human pride, Huygens and Fontenelle understand curiosity as natural characteristics of rational beings: What must be justified is its limitation, not its application. 2) While earlier condemnations of curiosity were related to the belief in limitedness of the cosmos and human knowledge, Huvgens' and Fontenelle's books show that scientific curiosity emerged as the natural epistemological correlate of the limitless cosmos.

Jana Tomešová

Other within the Other: Limits of philosophy in Judaism (case of anonymous letter against philosophy, MS Opp. 585)

Middle Ages were a very fruitful time for intellectual development and discussion, especially within the Jewish communities. The reason for that was, on a particular level, manifested by Maimonides and the following Maimonidean controversies, and on a universal level by conflict between philosophy and Judaism. What Maimondes tried to combine into the one coherent philosophically-religious discourse, the Maimonidean controversies and the heirs of these controversies had revealed and verbalised as problematical, dangerous and full of discrepancies. As many scholars, Jewish intellectuals and also philosophers demonstrated, the 'two young roes that are twins, which feed among the lilies' are not so peaceful and neighbourly as Maimondes tried to argue. One of these Jewish intellectuals is an anonymous author of Letter against philosophy (MS Opp. 585), who is (or more precisely his propositions, arguments and ideas) the theme of this paper.

Jewish communities, as they played their role of the "other" within the majority of society, always had to circumscribe and protect their Jewish identity. Philosophy as a "foreign science" can be then understood as a force of chaos trying to undermine essential pillars of Jewish religion and thereby also Jewish identity. Yet just as chaotic and perplexing philosophy can be for an enclosed structure, as the other "other", it can serve also as an enrichment and rectification of this structure.

Jakub Varga

Can a non-existent proposition be true? Late Medieval dispute about the truth of non-existent sentences

At least since Plato, the approach to the natural sciences has been shaped by the development of dialectics. A whole range of problems closely related to natural sciences arose in the progressive development of logic. One of these problems is associated with a question whether a non-existent proposition can be true. Let us imagine a situation where one scientist says in an ongoing discussion the sentence "The Earth is round", which he considers to be true and wants to defend it. The problem arises immediately after the statement has been made, because the sentence does not exist anymore. Given this fact, not only the speaker cannot consider his sentence to be true, but he also cannot fulfil his original intention, i.e. to defend it, because there is nothing to defend at that moment. This situation can also bring a relief to the opponent from 'imminent' longstanding discussion, because, although full of expectations, he does not have an opportunity to respond to anything. If it is valid that a sentence that does not exist cannot be a truth-bearer, the opponent does not have to argue against it.

This paper aims to explore the late-medieval debate between nominalists and realists about the truth of non-existent propositions. There will be also outlined some solutions to this issue, especially from realists (e.g. Walter Burley) and nominalists (e.g. William of Ockham) point of view.

Zdeněk Žalud

Jean Baptiste Morin and the Reform of Astrology at the Turn of 16th to the 17th Century

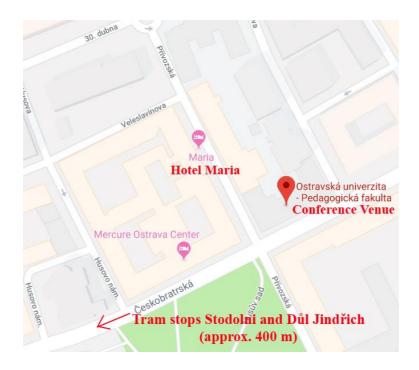
Proposed paper deals with the various attempts to reform astrology by famous scholars, e.g. Tycho Brahe, Johannes Kepler, Francis Bacon, Christopher Heydon and John Gadbury. It focuses on French astrologer J. B. Morin and his specific attitude to the problems of scientific status of astrology. It is based on study of Morin´s texts, especially his "Ad australes et boreales astrologos pro astrologia restituenda epistolae" and "Astrologia Gallica" as well as recent studies of Robert Westman, Robert Allan Hatch, Steven Vanden Broecke. I am going to compare different reformative proposals, their incentives and their outcomes and to explain the gradual disappearance of astrology from the scientific field in the 17th century.

Martin Žemla

Marsilio Ficino's Allegorical Reading of Natural Phenomena

As a Platonist, Marsilio Ficino (1433–1499) was deeply interested in light and its qualities. As a matter of fact, the metaphysics of light is so fundamental for him that it appears, treated more or less systematically, almost in all of his works. As a physician, he was naturally concerned with the corporeality of men and with the relation of human body to the physical world, both terrestrial and astral. However, when discussing astronomical and optical phenomena (e.g. refraction of light in water, camera obscura, and concave mirrors), they are important for him not as physical realities but as starting points for his allegorical hermeneutics and analogical interpretations. Similarly, when Ficino situates Sun in the centre of the universe, as its warming heart, ruling king and animating soul, he does so in the context of a metaphysical, rather than cosmological, heliocentrism. Indeed, physical astronomical "facts" seem generally irrelevant for him, being overlaid by their "spiritual" meaning. This becomes especially conspicuous when we realize that Copernicus arrived at his heliocentric hypothesis after reading Ficino's treatise on Sun and even quoting the same sources as Ficino.

CONFERENCE VENUE



The conference takes place at the room B303 Českobratrská 16, Moravská Ostrava, just next to the Hotel Maria. Lunches (including vegetarian alternative) and refreshments will be available for the speakers at the same building.

The closest tram stops are "Důl Jindřich" and "Stodolní". You can take trams 1; 2; 8; 18 from Ostrava Main Station to either of these stops. Journey takes approx. 5 minutes and you can buy ticket inside the tram by a credit card at the terminal. From Mošnov Ostrava Airport, you can take direct train to Ostrava Main Station.

LIST OF PARTICIPANTS

Ovanes	University of Innohruel	Ovanos Akamyan Quible as at	
Akopyan	University of Innsbruck	Ovanes.Akopyan@uibk.ac.at	
Olga	Palacký University, Olomouc	olga.chadaeva@upol.cz	
Chadaeva	ralacky Offiversity, Oloffiode	olga.chadaeva@upol.cz	
Jan Čížek	University of Ostrava	jan.cizek@osu.cz	
Crina Galiță	University of Bucharest	crina.galita@drd.unibuc.ro	
Jari Kaukua	University of Jyväskylä	jari.kaukua@jyu.fi	
Lukáš Lička	University of Ostrava; Czech	lukas.licka@outlook.com	
Edita's Eleka	Academy of Sciences, Prague	idkas.neka@odtiook.com	
Kateřina Lochmanová	University of Ostrava	lochmanovakatka@gmail.com	
Mattia	National Academy of Sciences,		
Mantovani	Halle	mattia.mantovani1987@gmail.com	
Tomáš			
Nejeschleba	Palacký University, Olomouc	tomas.nejes@gmail.com	
Pilar Herráiz	Mandania at Hairania I I I I I I I I I I I I I I I I I I I		
Oliva	Medeniyet University, Istanbul	piliherraiz@gmail.com	
Marek Otisk	University of Ostrava; Czech	marek.otisk@osu.cz	
Water Otisk	Academy of Sciences, Prague	marek.otisk@osu.cz	
	University of West Bohemia;	pavlas.petr@post.cz	
Petr Pavlas	Czech Academy of Sciences, Prague		
Alexandra	Palacký University, Olomouc	warrion@seznam.cz	
Petáková	, ,,		
Athanasios	KU Leuven	thrinotas@yahoo.gr	
Rinotas	Managed Heisensites Desc		
Daniel Špelda	Masaryk University, Brno	spelda@phil.muni.cz	
Jana	University of Ostrava	janele.tomesova@email.cz	
Tomešová	University of Ontrace	:-l., b.,	
Jakub Varga	University of Ostrava	jakub.varga2@gmail.com	
Mustafa	Medeniyet University, Istanbul	mustafay007@gmail.com	
Yavuz	Hussita Musaum Taham C-ash		
Zdeněk Žalud	Hussite Museum, Tabor; Czech Academy of Sciences, Prague	zalud@husitskemuzeum.cz	
Martin Žemla		martin zemla@unol cz	
iviai tiii Zeiiila	Palacký University, Olomouc	martin.zemla@upol.cz	

STEERING COMMITTEE:

- David Černín (cernin.d@gmail.com), University of Ostrava
- Lukáš Lička (lukas.licka@outlook.com), University of Ostrava; Institute of Philosophy of the Czech Academy of Sciences
- Tomáš Nejeschleba (tomas.nejeschleba@upol.cz), Palacký University Olomouc
- Marek Otisk (marek.otisk@osu.cz), University of Ostrava; Institute of Philosophy of the Czech Academy of Sciences

