

PROCLUS AND THE SCIENCES
APPROACHES TO UNDERSTANDING THE DIVINE

Anna Motta - Daniela P. Taormina

PROCLUS AND THE SCIENCES

A New Volume on Proclus

This volume explores Proclus' thought, emphasizing the interconnected role of mathematics, theology, and other scientific disciplines within his philosophical system. One of the main objectives is to analyse how, in the Platonic tradition, Proclus (410-485 CE) conceived mathematics not only as a science in its own right, but also as a fundamental tool for understanding the divine and metaphysical reality. An innovative aspect of the volume, which unifies the various essays, is the analysis of Proclus' exegetical practices, highlighting the significance of mathematics and the sciences more broadly in relation to the philosophical developments of his thought – and consequently, not only to the emergence of theological science, i.e. Platonic theology approached in a scientific way¹. This volume stems from a 2024 workshop organised by Anna Motta and Daniela P. Taormina, entitled *Proclus: Science and Theology*, held in Naples (Italy), with

We would like to thank the editor of the *Micrologus Library* and the entire staff of the SISMELE editorial office for their support throughout the publication process. Finally, we are grateful to the anonymous referees for their helpful comments, to Sergio Knipe for proofreading, and to Francesco Ferro, Marco Guerrieri, Giulia Rescigno, and Giovanni Trovato for their assistance in the final stage of revising the proofs.

1. Greek terms are transliterated without the use of symbols indicating tonic accent or long and short vowels. Critical editions of ancient texts are not indicated within the chapters unless there are ambiguities that cannot be resolved by the bibliography at the end of each essay. Abbreviations of ancient texts are indicated below. See Chenu 1957 and Saffrey 1996.

Proclus and the Sciences. Approaches to Understanding the Divine. Edited by A. Motta and D. P. Taormina, Firenze, SISMELE - Edizioni del Galluzzo, 2026, pp. 3-18

ISBN 978-88-9290-508-5 • e-ISBN 978-88-9290-484-2 • © 2026 The Publisher and the Authors
<https://doi.org/10.36167/ML136/Motta-TaorminaPDF> •  CC BY-NC-ND 4.0

support from the 2022 PRIN *Ancient Science, Ancient Philosophy Funds*. The publication continues a broader research project funded by the Italian Science Foundation 2021 and coordinated by Lorenzo Perilli. This project investigates how the status and methodology of science since the classical age have been consistently influenced by philosophical reflection, focusing on the scientific foundation of theological discourse in the imperial age.

Consistent with the workshop's objectives, this volume aims to identify the mathematical aspects of Proclean thought and to define the argumentative and scientific procedures allowing Proclus to provide theology with a universal, necessary, and demonstrable foundation². Recent analyses of the classical model of science certainly provide valuable insights into the philosophical significance of a number of important issues related to Neoplatonism and mathematics; however, they remain insufficient for explaining how Proclus sought to establish a scientific foundation for theology. Not all the contributions from the invited speakers at the conference have found their way into this volume, which also incorporates the results of the discussions that followed their presentations.

Regarding the collection of studies, the chapters offer significant insights into theology, mathematics, and other sciences across various Proclean works. This approach highlights diverse methodologies and a range of research interests, thereby providing perspectives on the philosophy of mathematics and the philosophical significance of the analytic-synthetic distinction, the axiomatic method, the hierarchical ordering of the sciences, and the status of logic as a science.

This multilingual volume (English, French, Italian) aims to serve as a key resource for scholars and students of Ancient Philosophy and Classics, offering insights into Proclean Platonism and the broader philosophical, scientific, and theological themes it addresses. These advancements in the field of Neoplatonism and Proclean studies provide a valuable foundation for understanding Proclus and his philosophy, particularly his integration of mathematics, science, and theology. Consistent with this research

2. See Cleary 2013.

program, the volume investigates how Proclus a) employs mathematics while excluding or reformulating other criteria of scientific analysis; b) formalises the divine *taxeis* on the basis of a demonstrative structure grounded in the articulation of hypotheses and conclusions established in the *Parmenides*; and c) uses dialectical concepts and arguments as a code to ‘translate’ elements from other theological traditions – originally expressed through different forms – into a clear scientific system.

Thematic Points in Three Sections

The volume is divided into three main thematic sections (plus a philological appendix), each containing essays that explore specific aspects of Proclus’ thought. This structure highlights the importance of engaging with mathematics, science, and theology, offering a renewed and advanced perspective on Proclean Platonism, its commentary practices, and the philosophical landscape in which his works were produced. Many contributors were among the scholars present at the 2024 workshop. As editors, we curated a diverse group of contributors, taking into account their international backgrounds, career stages, and gender representation to ensure the volume’s overall balance.

The section *Mathematics: Branches, Ontological Status and Method* investigates the ontological status of mathematical objects according to Proclus, as well as the special faculties of the soul involved in their comprehension. It also explores the use of the theological notion of harmony, which aims to reveal the essence, intelligible relations, and causality of the soul by taking its harmonic structure as a starting point. The chapters show how the demonstrative procedures employed by Proclus follow the structure of mathematical arguments, from which he infers general laws applicable at every level of the ontological hierarchy. The essays further address Proclus’ polemic against the idea that mathematics can be derived from empirical experience, highlighting his purely rational and metaphysical approach.

The section *Mathematics: A Bridge to Theology* examines the correspondences between mathematical objects and the gods in Proclus’ texts. The essays aim to demonstrate how this bridge is

constructed and how it surpasses previous positions in the history of Platonic thought. Proclus formalises the divine *taxeis* through a demonstrative procedure based on axioms and demonstrations. Drawing on Aristotle and Euclid, he equates axioms with common notions, treating them as the premises of science: they require neither proof nor evidence and must be accepted as the starting points of demonstrations, as they are immediate, evident, knowable in themselves, innate, and eternal. The chapters of this section provide a comprehensive presentation of the late Platonic metaphysical/theological system, showing the basis on which Proclus establishes an 'agreement' among the various theologies. They also examine the ways in which Proclus employs mathematical and analogical reasoning to explain complex theological concepts. Moreover, the section highlights a notable tension: mathematics may serve more as a confirmation of theological doctrines than as an independent pathway to divine insight.

The section *Other Sciences and the Divine* explores the philosophy of nature as a science and how Proclus establishes a solid foundation by identifying, in the *Timaus*, a connection between rational and empirical approaches to the natural world. Furthermore, through geometry, Proclus secures a universal, necessary, and demonstrable foundation for all philosophy of nature, while broadening the perspective to encompass other scientific disciplines and their relationship with the divine. This section demonstrates that Proclus' thought extends beyond mathematics to include sciences such as astronomy and even 'potamology' (the study of rivers), integrating them into a unified cosmological and theological framework. This approach emphasises how, for Proclus, the entire universe, in all its manifestations, reflects the divine order.

Aligned with the volume's overarching theme is the philological appendix. This essay examines the transmission and reception of Proclus' *Commentary on the Alcibiades* and *Commentary on the Timaeus* in Byzantium, comparing the Middle Byzantine period with the Palaiologan era. The chapter enriches the volume with a philological note highlighting the importance of Neapolitan witnesses for reconstructing Proclean texts. Indeed, we maintain that the dialogue among scholars of ancient philosophy cannot

be separated from engagement with philologists and philology. A study of Proclus necessarily reflects the view that philology is not a separate practice from philosophy but a true habitus.

All in all, this volume aims to reveal the intricate connections between mathematics, theology and science in Proclus' thought, offering a detailed analysis of how he employed mathematics to explore and understand metaphysical reality and the divine realm.

A Comprehensive Chapter-by-Chapter Summary

The first section *Mathematics: Branches, Ontological Status and Method* comprises five chapters. It opens with a chapter by Dominic J. O'Meara (*Syrianus and Proclus on Why True Mathematics Cannot Be Empirically Based*). The author presents arguments from Syrianus (*Commentary on Aristotle's Metaphysics*) and Proclus (*Commentary on the First Book of Euclid's Elements* – hereinafter in abbreviated forms) that refute Aristotelian explanations for the empirical origin of mathematical concepts and theories (Aristotelian abstractionism). These arguments establish the ontological status of mathematical objects as discursive projections of a priori concepts innate in the human soul (*ousiodeis logoi*), which derive from a transcendent demiurgic intellect. This ontology shows how mathematical objects can be precise, eternal, and universally valid, while still allowing for the creative activity of the mathematician in developing mathematical science. It further illustrates how mathematics functions as a science that foreshadows metaphysics and serves as a paradigm for physics.

The second chapter, by Anne Sheppard (*The Place of Music in Proclus' Conception of Mathematical Exegesis*), is devoted to harmonics. In *Republic* VII 530d–531c, harmonics, together with its «sister science» astronomy, is described as one of the branches of mathematics that the Guardians must master as they progress toward the highest level of their education: the study of dialectic. In 530d, Plato attributes the connection between harmonics and astronomy to the Pythagoreans. This link reappears in *Republic* X 616b–617d, and the connections between mathematics, music, and astronomy are also evident in the *Timaeus*, particularly in 35b–36b and 38b–39e. The details of Platonic/Pythagorean harmonic theory are developed more fully in later authors such as

Nicomachus of Gerasa and Iamblichus. Both *Republic VII* and the *Timaeus* provide the background for Proclus' brief remarks on *mousike* as a branch of mathematics in *Commentary on Euclid* 35.28–36.1 while *Republic VII* also informs his discussion of the four types of *mousike* in *Commentary on the Republic I* 56.20–60.13. In such a chapter, the author maintains that Proclus' use of the notion of mathematical exegesis in his *Commentary on the Timaeus* is grounded in the Platonic conception of the mathematical sciences. This framework also underpins his distinction between mathematical, physical, and philosophical modes of interpretation, developed in the context of his analysis of the musical scale in *Timaeus* 35b. Proclus' conception of mathematical exegesis encompasses music as well as astronomy, and he follows the Platonic and Pythagorean tradition of including one type of music within mathematics.

The central question of the third chapter, by Denis Walter (*Incommensurability in Geometrical Entities in Proclus' In Eucl. and In Prm.*), is the origin of incommensurability within Proclus' ontology. The chapter begins with an analysis of Proclus' *Commentary on the First Book of Euclid's Elements*. The issue is complex, and scholarly debates have suggested that incommensurability might not be a subject of scientific inquiry at all. Yet how does it arise at a specific ontological level, and how does it relate to a particular mode of cognition? This chapter first shows where geometrical entities are situated – namely, between intelligible and sensible realm – and then demonstrates why sensible matter, by itself, cannot unqualifiedly account for incommensurability. To this end, incommensurability is contrasted with imprecision, the defining characteristic of the sensible world. However, intelligible matter alone cannot unqualifiedly account for incommensurability either, since some objects projected onto intelligible matter (i.e. the soul) do not exhibit this feature. Instead, the chapter shows that incommensurability is an intrinsic property of specific geometrical entities, belonging to them as other identifiable characteristics do. Drawing on Proclus' *Commentary on the Parmenides*, the chapter ultimately argues for the plausibility of accepting a form of incommensurability.

The fourth chapter, by Álvaro José Campillo Bo (*The Unfolded Syntax of Intellect: Proclus on the Metaphysical Foundations of Ele-*

mentary Arrangements) analyses Proclus' epistemology and ontology of the discursive sciences, focusing on the noetic foundations of dialectic and mathematics. It examines demonstrative reasoning and elementary dispositions as iconic projections of the intelligible structure of Intellect. Drawing on Proclus' philosophy of language, it argues that discursive syntax reproduces the relational articulation of noetic activity. The chapter shows how the dynamism of Intellect is fully expressed in dialectical operations and only derivatively in mathematical demonstration, thereby grounding a hierarchical dependence of mathematics upon dialectic and their coordination within 'common mathematics'. This dependence is clarified through an analysis of the continuous logical syntax shared by both sciences. As a case study, the chapter demonstrates how propositions 1-4 of the *Elements of Theology* are analytically derivable from Euclidean arithmetical definitions. It concludes that elementary logical syntaxes in the contemplative sciences function not merely as methodological devices but as discursive enactments of the noetic order.

In the fifth chapter (*Can the Will Ground Science?*), Antonio Vargas challenges interpretations that view the *Elements of Theology* as a work of dialectic based on self-evident axioms. He argues that Proclus denies any ultimate grounding of knowledge in axiomatic propositions. For the philosopher, the science that grounds all knowledge on an unhypothetical first principle is Parmenidean dialectic, and his *more geometrico* metaphysics, the *Elements of Theology*, cannot be considered an example of this science. Although some have speculated that this might be the case because the *Elements* lacks an initial list of axioms and definitions, Vargas argues that this absence must be viewed within the broader context of the *Elements'* many departures from the geometric ideal, arguing that the lack of such a list is ultimately insignificant. According to Vargas, the *Elements* makes no use of what Proclus identifies in the *Commentary on the Parmenides* as our access to an unhypothetical first principle – namely, the so-called 'one of the soul', which, based on *De Providentia*, can in certain respects be identified with the will. He complements this negative argument regarding the *Elements* with a positive argu-

ment about how the will, in Proclus, can serve as a ground for knowledge. In Proclus, science is not grounded in axioms but in the absolute unity of the soul's will. The *Elements of Theology*, while pedagogical, is not dialectical, since it never begins from the unhypothetical first principle. Instead, true dialectic involves the interplay of will, *nous*, and discursive reasoning (*dianoia*).

The second section, *Mathematics: A Bridge to Theology*, includes a further five chapters. The first chapter of this section and the sixth of the volume, by Carlos Steel (*Proclus on the Usefulness of Mathematics for Theology*), begins with the introduction to Proclus' *Commentary on Euclid*, where he declares that «mathematics prepares intellectual insight for theology», as it «reveals in its reasonings the truth concerning the gods». Throughout many other passages, Proclus emphasises that mathematical science should serve as a 'stepping-stone' to elevate the soul to higher realms, rather than being valued solely for the technical discussion of its demonstrations. These programmatic declarations have often led to a neglect of the real import of Proclus' geometrical arguments, making its whole purpose 'theological'. Steel extensively discusses Gouling's study, which argues that «geometry, practiced in a certain way, constituted for Proclus the core of the higher theurgy». He contends, however, that one should not be misled by Proclus' Neoplatonic statements about mathematics as a bridge to theology. The theological speculations in the text are digressions, illustrating how it is possible from our discursive perspective – the proper domain of mathematics – to gain intellectual insight into the divine causes. In particular, Steel examines the difference between the technical 'textual' analysis of Euclid's demonstrations and the speculative approach (*theoria*) to reality, a distinction present throughout all of Proclus' commentaries.

In the seventh chapter (*La mathématique générale chez Proclus*), Alain Leroi-Gourhan aims to demonstrate that, above the particular mathematical sciences of arithmetic, geometry, music, and the spherical, Proclus – in the first Prologue of *In Euclidem* – introduces the concept of *general* mathematics, which is distinct from mathematics *in general*. General mathematics represents a category that transcends the particular mathematical sciences and goes beyond mathematics in general. This chapter shows how

general mathematics constitutes the highest stage within the discursive sciences in the ascent toward the Intellect and the divine. Lernould demonstrates that it functions as an intermediate, unifying science between the particular mathematical disciplines and the higher philosophical sciences (dialectic, intellect), without reducing it to mere logical abstraction. He further underscores the ontological priority of «common theorems» (universals *ante rem*) over their instantiations in arithmetic or geometry, aligning them with productive principles rather than post hoc generalisations.

In the eight chapter (*Relations that Are Given and Established. Proclus' Use of Analogical Reasoning in Theology*), Marije Martijn suggests that one of the main methods of human reasoning is analogical reasoning, in which conclusions about a less-known 'target domain' are drawn from its similarity to a better known 'source domain'. For Proclus, analogy constitutes a key component of scientific reasoning across all sciences and, *a fortiori*, in theology. This chapter examines the role of analogical reasoning in Proclus' understanding of theology, addressing his definition of analogy, its relation to mathematical analogy or proportionality, the various kinds of analogy he distinguishes within the context of theology, and some problematic aspects. A central challenge for analogical reasoning is justifying the assumed similarity between the 'source domain' and the 'target domain'. Martijn discusses how, according to Proclus, the use of different kinds of analogy in theology can be justified. Unsurprisingly, the primary justification is ontological, relying on emanation and reversion, which themselves establish analogical relations to some degree. In addition, in theology, the *via analogiae* merges with the *via eminentiae*, yet is ultimately surpassed by the *via negativa*. Proclus' conceptual toolkit also includes certain problematic forms of analogy, notably symbolic and literary analogies, for which the ontological justification is less apparent. In these cases, he appears to introduce a separate category: a relation of similarity established by an initiate, such as a philosopher or priest. Even here, however, a real – but remote – ontological analogy underlies the relation.

In the ninth chapter (*L'ἀριθμός divino nel sistema metafisico di Proclo*), Miriam Cutino focuses on Proclus' ordered theology, with particular attention to the concept of 'number', the notion

of ‘multiplicity’, and the relationship between the monad and the series in the Neoplatonic ontological hierarchy. The ontological realm presented by Proclus in the *Platonic Theology* is a «meta-physical system full of unity» – i.e. one in which the presence of unity holds fundamental existential significance as the condition of being for each entity. The chapter aims to study the articulation of the *taxis*, namely the universal ontological hierarchy, which itself comprises three different forms of order. It demonstrates how the structure of Proclus’ divine *diakosmoi* is organised according to a mathematical analogy, whereby the Pythagorean divine numbers correspond to the various levels of the ontological reality. The analysis then focuses on the ontological significance of the term *diakosmos* as number and the paradigmatic cause of unification, and of the term *arithmos* as the first ‘otherness’ introduced by the intelligible-intellectual world, relating it to its usage in the works of Iamblichus and in Sirianus’ *Commentary on Aristotle’s Metaphysics*.

In the tenth chapter (*Les structures numériques des ordres divins dans la Théologie Platonicienne de Proclus. De la triade à l’hebdomade et à la dodécade*), Philippe Hoffmann explores how Proclus links ‘science’ and ‘theology’ through arithmological structures in his *Platonic Theology*, a comprehensive synthesis of Plato’s doctrines. He focuses on the divine order of the intellectual gods, organised according to a hebdomadic (sevenfold) structure, following the triadic patterns of the intelligible and intelligible-intellectual orders. The intellectual hebdomad consists of two triads plus a separative monad: the triad of the ‘fathers’ (Cronos, Rhea, Zeus), paired with an anonymous ‘immaculate’ triad, and completed by the monad, yielding $6 + 1 = 7$. This arrangement relies on earlier triads to maintain mimetic continuity within the processional hierarchy. The structure is based on the topography of Plato’s *Phaedrus* myth (246e-248a), which distinguishes the supercelestial realm, Heaven (supersensible in Proclus’ view), from the subcelestial vault – Heaven occupying the middle position in all three divine orders. Hoffmann concludes that this hebdomad fits into a broader arithmetic progression (1-2-3-7-12), culminating in the hypercosmic gods and intriguingly echoing the start of Hofstadter’s series in modern mathematics.

The section *Other Sciences and the Divine* comprises the eleventh and twelfth chapters. In the eleventh chapter (*Proclus' Potamology: The Role of Rivers in Eschatology*), Gerd Van Riel examines how Proclus integrates cosmology, psychology, and soteriology into a coherent vision. Van Riel explores Proclus' interpretation of the role of rivers in Plato's eschatological myths: Lethe, Styx, Acheron, Pyriphlegethon, and Cocytus (as set out in *Phaedo* and *Republic X*). Unsatisfied with merely physical or allegorical readings of these rivers, the later Neoplatonists combined a literal interpretation (on the cosmological level) with a moral message concerning the destiny of the soul. The role they attribute to the rivers ("potamology") thus provides valuable insights into the interaction between body and soul, and the relationship between cosmology, theology, physics, and ethics.

The final chapter (*Proclus' "Theological" Spherical Cosmic Whole and His Scientific Innovative Astronomy*) offers a dense and innovative contribution to Proclus' astronomical and ontological thought, with a theoretical ambition that unites ancient philosophy, modern physics, and Platonic theology into a coherent and interdisciplinary discourse. Emilie Kutash argues that, although Proclus admired Ptolemy's *Almagest*, he rejected Ptolemy's mechanical attempts to reconcile the apparent irregular movements of the planets through epicycles and eccentrics. Guided by Platonic theology, Proclus envisioned the cosmos as a finite, spherical, and thus curved space. He held that all apparent irregularities in planetary motions stem from 'self-moving' motion, which inevitably reverts toward circular paths and ultimately toward the One, the spherical center symbolizing eternal unity. In contrast to models based on concentric spheres or epicycles, Proclus conceived of planets as self-moving bodies with independent three-dimensional trajectories (in longitude, latitude, and depth), producing spiral motions as a mean between purely circular and straight lines. This theory explained astronomical anomalies through higher principles and was later cited by Copernicus for its account of combined motions. Proclus also questioned the Euclidean parallel postulate, anticipating the notion of non-linear space. Conceptually, his model bears intriguing parallels to Einstein's curved space and space-time continuum, developed many centuries later.

In the philological Appendix (*Difformità storico-tradizionali in Proclo, Commento all'Alcibiade I e Commento al Timeo tra il periodo mediobizantino e l'età dei Paleologi*: Giorgio Pachimere (Napoli, BN, III.E.17, *In Alc.*), Giovanni Catrario (Napoli, BN, III.D.28, *In Ti.*) e lo *ὑπατος τῶν φιλοσόφων* Michele Psello (Patmos Eileton 897), Mariella Menchelli provides a philosophical reading of the reception of Proclus' studies on Plato's dialogues in Byzantium, highlighting their close connection with the transmission of Neoplatonic commentaries, some of which were included in the ninth-century «philosophical collection». During the first Palaeologan Age, the same – or other – texts were carefully copied and studied by learned philosophical circles in Constantinople and, for example, in Thessalonike, as manuscript evidence appears to confirm. The collections in Naples provide valuable examples in which it is now possible, in some cases, to identify the hands and scribes at work, offering insights into some important primary witnesses and their role in shaping the reading of the text. Proclus' *Commentary on Plato's First Alcibiades*, Neap. BN III.E.17, is in part also a *codex unicus*. Proclus' *Commentary on Plato's Timaeus*, Neap. BN III.D.28, belongs to the ϕ -branch of the textual tradition, along with ms. Chigi R VIII 58 and Patmos Eileton 897, a paper scroll from the eleventh century – the age of Psellus – featuring a rich apparatus of mathematical scholia. BNN III.E.17 was largely copied by Georgius Pachymeres, assisted by two copyists, one of whom Pantelis Golitsis has identified as Nikephoros (e. g. *Laches, initium*). Neap. III.D.28 was written by John Katrarios. In the same branch, Patmos Eileton 897 chart 7.747 $\times$ 250 mm, ff. 19, *in volumine*, is an exceptional paper scroll, discovered by A. Kominis in the 1980s: its reading of the text is also significant for the exegetical apparatus it contains. The aim of this chapter is to explore these three witnesses and their implications for Proclus' text.

Some Concluding (and Bibliographical) Remarks

In recent years, critical editions and studies on Proclus have proliferated, enabling him to be regarded as the thinker who identified religion with philosophy by theologising Platonism

and rationalising religion: the fusion of religion and philosophy gave rise to the science of theology – that is, philosophical speculation on the divine. The relationship between philosophy and theology in ancient thought remains a central subject of study, as shown in the recent volume *L'Esprit critique dans l'Antiquité*, II. *La naissance de la théologie comme science*³, the foundational studies of André-Jean Festugière and Pierre Hadot remain essential for reconstructing the theoretical background, methods, and significance of this Proclean endeavor⁴. These two scholars emphasised the link between Neoplatonic thought and religious traditions. Their studies should be considered alongside important texts tracing discussions on the origins of theology as a science, within a framework that underscores the centrality of Plato's *Parmenides*⁵. Without merely quoting the Iamblichean statement, Proclus affirms the prominent position of the *Parmenides*, where dialectic is identified with «theological science» (*episteme theologike*)⁶. Theological truth is expressed in various dialectically intertwined forms. When assessed in light of the overall Proclean system and the Athenian project of a theological science – as Jean Pépin and Stephen Gersh have shown – the modes of discourse on the divine reveal not merely a classificatory ambition, but the presence of a genuine philosophical method⁷. The editorial work on the *Platonic Theology* by Henri Dominique Saffrey and Leendert G. Westerink, the volume *Proclus et la Théologie Platonicienne* edited by Alain-Philippe Segonds, Carlos Steel *et al.* (Louvain / Paris 2000)⁸, and the studies of Philippe Hoffmann all suggest that, in addition to the *Commentary on the Parmenides*, we must take into consideration at least one other Proclean work, namely the *Platonic Theology*⁹. In this text, Proclus provides a scientific description of the regulated procession of real-

3. Boulnois *et al.* 2024.

4. See, e.g., Festugière 1966–1968; Festugière 1969; Festugière 1970; Festugière 1971; Hadot 1987.

5. Saffrey 1992.

6. On the importance of *Parmenides* in Neoplatonism, see the still fundamental Dodds 1928; Saffrey 1984.

7. Pépin 2000; Gersh 2000.

8. See also Saffrey – Westerink 1968–1997; Gavray and Hoffmann 2024.

9. Hoffmann 2019. See also Gavray – Hoffmann 2024.

ities emanating from the One. He expounds the theology attributed to Plato, as disseminated in the dialogues, and orders it according to the teaching of the second part of the *Parmenides*, which is interpreted as a discourse on theological realities that, once harmonised with ancient doctrines, constitute the 'scientific' identity of the gods of traditional polytheism.

The scientific character of this exposition is evident in the second *kephalaion* of the *Platonic Theology*: «How many propositions must be proved before the number of divine classes can be found? Systematic exposition of these propositions»¹⁰. This is a «demonstration» of four fundamental propositions that precedes the «discovery» of the plurality of divine classes, the existence of which is then scientifically demonstrated on the basis of these propositions. What emerges is the pursuit of demonstrative perfection, intended to firmly establish the dogma of Greek polytheism – namely, the existence of a plurality of gods. These propositions, which Proclus calls «axioms», correspond to common notions already possessed by the soul and evident to those who – unlike Christians – are not constrained by 'atheistic' prejudices¹¹. This volume seeks to make a substantial contribution to the scholarly debate on the significance of Proclus' use of the sciences, and of mathematics in particular. Our aim is to show how Proclus, while adhering to a classical model of science, adapts certain features of this ancient paradigm to epistemology, cosmology, ontology, and Neoplatonic metaphysics.

Bibliography

- O. Boulnois – Ph. Hoffmann – C. Lafleur – J.-M. Narbonne (éd.), *L'Esprit critique dans l'Antiquité*, II. *La Naissance de la théologie comme science*, Paris, Les Belles Lettres, 2024.
- M.-D. Chenu, *La Théologie comme science au XIII^e siècle*, Paris, Vrin, 1957.
- J. J. Cleary, *Proclus' Philosophy of Mathematics*, in J. M. Dillon – B. O'Byrne – F. O'Rourke (eds), *Studies on Plato, Aristotle and Proclus*, Leiden – Boston, Brill, 2013, 201–20.

10. Procl. *Theol. Plat.* III 1.10–11.

11. Hoffmann 2012.

- E. D. Dodds, *The Parmenides of Plato and the Origin of the Neoplatonic One*, «Classical Quarterly» 22.3-4 (1928), 129-42.
- A.-J. Festugière (éd.), *Proclus: Commentaire sur le Timée*, 5 vol., Paris, Vrin, 1966-1968.
- A.-J. Festugière, *L'ordre de lecture des dialogues de Platon aux V^e-VI^e siècles*, «Museum Helveticum», 26.4 (1969), 281-96.
- A.-J. Festugière (éd.), *Proclus: Commentaire sur la République*, 3 vols., Paris, Vrin, 1970.
- A.-J. Festugière, *Études de philosophie grecque*, Paris, Vrin, 1971.
- M.-A. Gavray - Ph. Hoffmann, *Modes d'exposition de la théologie dans le néoplatonisme athénien (Proclus, Damascius, Simplicius)*, in O. Boulnois - Ph. Hoffmann - C. Lafleur - J.-M. Narbonne (éd.), *L'Esprit critique dans l'Antiquité*, II. *La Naissance de la théologie comme science*, Paris, Les Belles Lettres, 2024, 219-58.
- S. Gersh, *Proclus' Theological Methods. The Programme of Theol. Plat. I. 4*, in A.-Ph. Segonds - C. Steel (éd.), *Proclus et la Théologie platonicienne*, Leuven - Paris, Leuven University Press - Les Belles Lettres, 2000, 15-27.
- P. Hadot, *Théologie, exégèse, révélation, écriture dans la philosophie grecque*, in M. Tardieu (éd.), *Les Règles de l'interprétation*, Paris, Éditions du Cerf, 1987, 13-24.
- Ph. Hoffmann, *Un grief anti-chrétien chez Proclus: l'ignorance en théologie*, in A. Perrot (éd.), *Les Chrétiens et l'hellénisme. Identités religieuses et culture grecque dans l'Antiquité tardive*, Paris, Éditions Rue d'Ulm, 2012, 161-97.
- Ph. Hoffmann, *L'herméneutique de Proclus et la constitution d'un système théologique dans la Théologie Platonicienne*, «Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres» 3 (2019), 961-1005.
- J. Pépin, *Les modes de l'enseignement théologique dans la Théologie platonicienne*, in A.-Ph. Segonds - C. Steel (éd.), *Proclus et la Théologie platonicienne*, Leuven - Paris, Leuven University Press - Les Belles Lettres, 2000, 1-14.
- H. D. Saffrey, *La Théologie Platonicienne de Proclus, fruit de l'exégèse du Parménide*, «Revue de théologie et de philosophie», 116 (1984), 1-12.
- H. D. Saffrey, *Accorder entre elles les traditions théologiques: une caractéristique du Néoplatonisme Athénien*, in E. P. Bos - P. A. Meijer (eds), *On Proclus and his Influence*, Leiden, Brill, 1992, 35-50.
- H. D. Saffrey, *Les débuts de la théologie comme science (III^e-VI^e siècle)*, «Revue des sciences philosophiques et théologiques», 80 (1996), 201-20.
- H. D. Saffrey - Leendert Gerrit Westerink (éd.), *Proclus. Théologie platonicienne*, 6 vols., Paris, Les Belles Lettres, 1968-1997.

Anna Motta - Daniela Taormina, *Proclus and the Sciences*

This chapter introduces this new collective volume on Proclus that investigates how late antique Platonism integrates mathematics, theology, and the sciences into a single philosophical project. The book asks how Proclus (410–485 CE) could treat mathematics not only as an autonomous discipline but also as a methodological paradigm for giving theology a universal, necessary, and demonstrable foundation. The editors stress that prevailing accounts of ancient scientific models, though useful, do not fully explain Proclus' attempt to “scientise” theology; therefore, the volume foregrounds his exegetical practices and his formal use of hypotheses and conclusions, especially in relation to Plato's *Parmenides*.

Anna Motta

University of Naples Federico II (Italy)
anna.motta@unina.it

Daniela P. Taormina

University of Rome Tor Vergata (Italy)
taormina@lettere.uniroma2.it