

# Andreas Moutsios-Rentzos

## Short CV

Andreas Moutsios-Rentzos is Assistant Professor of Mathematics Education at the Department of Pedagogy and Primary Education (PTDE) of the National and Kapodistrian University of Athens (NKUA). He holds a Ptychio in Mathematics (NKUA), an MSc in Mathematics Education from the University of Warwick, a PhD in Mathematics Education from the University of Warwick (with a scholarship from the Greek State Scholarships Foundation), while he has conducted postdoctoral research on systemic approaches and complexity in the connections of epistemology with the psychology of learning and teaching with educational design for mathematics education at the University of the Aegean (Supervisor Prof. F. Kalavasis). He is the Scientific Coordinator of the research project entitled "Re-Experiencing Mathematics through Digital Storytelling"; Sub-action 1 of the Call "Funding of Basic Research (Horizontal support of all Sciences), National Recovery and Resilience Plan (Greece 2.0)". He participates and participated, as a member of the research team, in funded research projects (e.g. Erasmus+, "DiToM: Diagnostic Test in Mathematics"). He is the supervisor of two PhD candidates and seventeen masters dissertations, member of the three-member advisory committee of four doctoral theses, of the advisory committee of twenty-two masters dissertations, and member of the seven-member examination committee of six doctoral theses.

Since 2021 he is the Director of the Laboratory of Mathematics, History, Philosophy and Didactics of Mathematics (P.T.D.E., NKUA). He is responsible for the pedagogical design of the competition "Pythagoras" of the Hellenic Mathematical Society. He is the Editor-in-chief of the scientific journal *Euclides γ'*, Member of the Editorial Board of the International Journal for Mathematics in Education (HMS i-JME), Member of the Scientific Committee of the scientific journal *Research in Mathematics Education*, as well as Member of the Scientific Committee of the edited volume series *Issues in Educational Design*. He is a member of the International Commission for the Study and Improvement of Mathematics Teaching (CIEAEM), an elected member of the Board of the Greek Association of Researchers in Mathematics Education, a member of the International Group for the Psychology of Mathematics Education, and the Hellenic Mathematical Society.

He has served as a reviewer in eleven international scientific journals (e.g. *Journal for Research in Mathematics Education*, *Educational studies in mathematics*, *ZDM Mathematics Education*, *Journal of Mathematics Teacher Education*, *International Journal of Science and Mathematics Education*, etc.), as well as in a series of international and Greek conferences (C.E.R.M.E., P.M.E., Ev.E.Δl.M., E.M.E. etc.). He participated in the work of more than forty international and Greek scientific conferences, served as president and vice-president of the Organizing Committee respectively in one and one international scientific conference, while he has been a member of the Organizing Committee and the Scientific Committee respectively of four and fourteen scientific conferences.

His teaching experience includes teaching in undergraduate and postgraduate programs at the National and Kapodistrian University of Athens, the University of the Aegean, the University of Thessaly, the University of Patras, and the University of West Attica, in content related to the Didactics of Mathematics, as well as in the fields of didactics, educational engineering, and research methodology.

His research interests focus on exploring the complexity of the teaching–learning phenomena with multifaceted interdisciplinary approaches, including: Argumentation and Proof in Mathematics Education; Interdisciplinary, systemic approaches and complexity in mathematics education: teaching, learning, assessment; Digital storytelling in Mathematics Education; Didactics of Mathematics for pre-/in-service teachers; Interactions amongst cognitive/affective experiences-dispositions when dealing with mathematical tasks; Transitions to primary/ secondary mathematics; Phenomenology and Didactics of Mathematics.

His published scientific work includes more than one hundred papers, such as: articles in international scientific journals; book; chapters in international and collective volumes; papers, workshops and exchange groups on proceedings of international and Greek conferences; prefaces to books; scientific editing of proceedings of international conferences, of the translation into Greek of scientific books and of a special issue of an international scientific journal etc.

[<http://www.primedu.uoa.gr/amoutsiosrentzos.html>: <https://amoutsiosrentzos.com>]

#### Indicative publications

- Moutsios-Rentzos, A. (in press). Arguments in mathematics and physics: an interdisciplinary, systemic communicational approach to teacher education about scientific inference and evidence. In *Proceedings of the Thirteenth Congress of the European Society for Research in Mathematics Education (CERME13)*
- Moutsios-Rentzos, A., Kalavasis, F., Meimaris, M., & Kritikos, G. (in press). "My relationship with mathematics": a digital storytelling-centered investigation with pre-service teachers. Chapter in Edited Book published by Smithsonian Institution Scholarly Press.
- Stylianides, G. J., Stylianides, A. J., & Moutsios-Rentzos, A. (2023). Proof and proving in school and university mathematics education research: a systematic review. *ZDM Mathematics Education*. <https://doi.org/10.1007/s11858-023-01518-y>
- Kalavasis, F., & Moutsios-Rentzos, A. (2023). Re-constructing the Image of Mathematics through the diversity of the historical journeys of famous mathematicians. In S. Romero Sanchez, A. Serradó Bayés, P. Appelbaum, G. Aldon (Eds.), *The Role of the History of Mathematics in the Teaching/Learning Process* (pp. 167–187). Springer, Cham. [https://doi.org/10.1007/978-3-031-29900-1\\_7](https://doi.org/10.1007/978-3-031-29900-1_7)
- Moutsios-Rentzos, A. (2022). Proving as multimodal argumentation: an investigation based on Toulmin's scheme. In J. Hodgen, E. Geraniou, G. Bolondi, & F. Ferretti. (Eds.), *Proceedings of the Twelfth Congress of the European Society for Research in Mathematics Education* (pp. 283–290). Free University of Bozen-Bolzano and ERME.
- Kasimatis, K., Moutsios-Rentzos, A., & Kalavasis, F. (2021). A systemic approach to authentic evaluation in education. In T. Barkatsas & P. McLaughlin (Eds.), *Authentic assessment and evaluation approaches and practices in a digital era* (pp. 329–349). Brill. [https://doi.org/10.1163/9789004501577\\_015](https://doi.org/10.1163/9789004501577_015)
- Moutsios-Rentzos, A., Pinnika, V., Kritikos, G., & Kalavasis, F. (2020). Appearances of the equals sign in primary school mathematics and natural sciences: an interdisciplinary, systemic approach. *Quaderni di Ricerca in Didattica*, 7, 285–294.
- Moutsios-Rentzos, A, Meimaris, M., & Giannakouloupoulos, A. (Eds.) (2019). *Proceedings of the International Digital Storytelling Conference "Current Trends in Digital Storytelling: Research & Practices"*. Zakynthos: UNESCO Club of Zakynthos.
- Moutsios-Rentzos, A., Kalavasis, F., & Sofos, E. (2017). Learning paths and teaching bridges: The emergent mathematics classroom within the open system of a globalised virtual social network. In G. Aldon, F. Hitt, L. Bazzini & U. Gellert. (Eds.), *Mathematics and technology* (pp. 371–393). Springer. [https://doi.org/10.1007/978-3-319-51380-5\\_17](https://doi.org/10.1007/978-3-319-51380-5_17)
- Moutsios-Rentzos, A., Spyrou, P., & Peteinara, A. (2014). The objectification of the right-angled triangle in the teaching of the Pythagorean Theorem: an empirical investigation. *Educational Studies in Mathematics*, 85(1), 29–51. <https://doi.org/10.1007/s10649-013-9498-y>