History of mathematics for the Million

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PL - Theme 1

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In the Western world today, mathematics is often perceived as an abstract and daunting discipline, remote from everyday life and accessible only to a select few. This perception alienates many people and contributes to widespread mathematical anxiety. In this talk, I will address these challenges by advocating for the role of the history of mathematics in reshaping public attitudes.

Through exploring mathematical history, we can move beyond abstract concepts and algorithms to understand what it truly means to engage with mathematics. History allows us to see mathematics not merely as a body of knowledge, but as a human endeavour that has evolved alongside diverse cultures and historical periods. We can ask: What problems were mathematicians of the past trying to solve, and how did they approach them? What motivated their mathematical investigations? By examining stories from ancient Babylon to modern-day discoveries, we reveal mathematics as a living, dynamic process rooted in human curiosity and creativity.

But how does mathematics education feature these problems in general education? I will argue that to change this perception it is important to engage whole population and not only those who learn mathematics in schools and colleges, but their families also.

The principles I will discuss are drawn from my book, A *Little History of Mathematics* (Yale University Press, 2025), which spans 35,000 years of mathematical development, from prehistoric counting to cutting-edge research in the 21st century. Written with this public in mind, the book presents short, engaging episodes that showcase the diversity and richness of mathematical thought throughout history. My aim was to create a resource that could spark conversations between generations–encouraging teenagers, parents, and grandparents alike to reflect on how mathematics has shaped different civilizations and how its universal appeal allowed us to have a universal discipline underlying our communications and technologies from philosophy to software engineering and many other practical applications.

By grounding mathematical concepts in stories of real people and their challenges, we can inspire a more inclusive and appreciative view of mathematics. I will suggest further readings that build on these ideas, including Glen Van Brummelen's *The Mathematics of the Heavens and the Earth*, Jacqueline Stedall's *Mathematics Emerging*, and George Gheverghese Joseph's *The Crest of the Peacock*. Through such explorations, we can help demystify mathematics and reveal its profound human significance.



Snezana Lawrence is a historian of mathematics based in the UK, known for making mathematics engaging and accessible through her writings and educational work. Her books are A Little History of Mathematics (2025), Mathematical Meditations (2025), A New Year's Present From a Mathematician (2019), and Mathematicians and Their Gods (2015), each weaving historical insights with captivating storytelling. Beyond her publications, Snezana has significantly impacted mathematics education through her work on the history of mathematics.

She was on the advisory panel redesigning the National Curriculum in Mathematics in UK in 2014, arguing for inclusion of the history of mathematics; served as Chair of the History and Pedagogy of Mathematics International Study Group (2020–24) and was the first Education Officer of the British Society for the History of Mathematics. She is the Assistant Editor of the British Journal for the History of Mathematics, overseeing the educational submissions and contributes to international journals, including the Nexus Network Journal.

Since 2015, she has held visiting professorships at Masaryk University (Czech Republic), the University of Lorraine (France), and the University of Kragujevac (Serbia). She also advises the University of Aveiro on research related to the history of mathematics.