

BO1.1. History of Mathematics

Sheet 2 — MT22

Reading for weeks 4 and 5:

	Stedall	Chapters 8, 11, 12, 13
and <i>either</i>	Katz (1st/2nd ed.)	Sections 11.2, 14.2, 14.4, Chapter 13
or	Katz (3rd ed.)	Sections 14.1, 19.1, 19.2, Chapter 17

(On power series, limits and continuity, 18th century analysis, the theory of equations, and the origins of abstract algebra.)

Essay to be submitted ahead of the class in week 5:

Read the derivation of d'Alembert's wave equation (1747) (*Mathematics emerging*, §10.1.2). Explain its context, point out the most important aspects of its content, and assess its significance. (1,000 words)

Discussion topic to be prepared for the class in week 5:

Read §§1.1.2–1.1.3 of the article cited below. We have touched upon the idea that the language in which mathematics is published can affect its circulation in scientific communities. How does the process of translation further affect the movement of mathematical ideas between different groups of people? How is the mathematics itself affected during this translation process?

Anuj Misra, 'Persian astronomy in Sanskrit: A comparative study of Mullā Farīd's *Zīj-i Shāh Jahānī* and its Sanskrit translation in Nityānanda's *Siddhāntasindhu*', *History of Science in South Asia* 9 (2021), 30–127 [available electronically via SOLO]