BO1.1. History of Mathematics

Sheet 2 — MT20

Reading for weeks 4 and 5:

	Stedall	Chapters 8, 11, 12, 13
and *either*	Katz (brief)	Sections 9.1, 10.1, 14.2, Chapter 12
or	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:

In discussing Isaac Newton and his work, we touched upon the idea of 'mathematical myth-making': the telling of (possibly apocryphal) stories about our mathematical heroes and their supposed flashes of genius, etc. Can you think of any other examples of exaggerated stories about mathematicians? Should we simply condemn these stories as inaccurate, or do they have a role to play within mathematical culture?

Christopher Hollings: christopher.hollings@maths.ox.ac.uk