

Reviel Netz (Stanford): Archimedes' Floating – are these Bodies?

Abstract

Modern readers typically insert “bodies” into the translation of the title of Archimedes' *ochoumenōn*. Is this justified? Or put differently: when Galileo asserted that the Book of Nature was written in the language of mathematics (that is perhaps, that bodies simply are, in some important sense, mathematical), his main ancient model was likely this treatise by Archimedes. Would this be a fair characterization of Archimedes' own understanding? The answer to such questions seems, itself to be floating, in flux: the level of idealization required for the mathematical argument, the tools that are imported from pure geometry, the very goals of the study, shift in the course of the treatise. I will survey some of the conflicting pieces of evidence, and suggest Archimedes' possible motivations for producing this foundational work of mathematical physics.