The Antikythera Mechanism and the Mechanical Universe

A Public Lecture by Michael Edmunds

of Cardiff University & the Antikythera Mechanism Research Project

as part of the Thirteenth Biennial History of Astronomy Workshop

Wednesday, July 5, 2017, at 7 pm Hesburgh Auditorium, Hesburgh Center for International Studies University of Notre Dame

The idea of a "mechanical universe" tends to be associated with sixteenth- and seventeenthcentury pioneers like Copernicus, Kepler, Galileo, and Newton. Yet recent investigation of the Antikythera Mechanism, an ancient Greek astronomical artifact from around 100 BC, indicates that "mechanical" models of the universe have been around for a much longer time—as far back as the third century BC—and that knowledge of such devices was critical in the development of cosmology and philosophy.

In this illustrated public talk, lead researcher Michael Edmunds will offer a detailed description of the discovery of the structure and functions of the Antikythera Mechanism—a complex device that contained well over thirty gearwheels. He will review the evidence for this technology's persistence until its spectacular and rather sudden re-appearance in Western Europe around 1300 AD. He shows that we can chart a path across the centuries, between these ancient devices and the development of modern astronomy, as reflected in Kepler's aim (expressed in a 1605 letter) to "show that the heavenly machine is not a kind of divine, living being, but a kind of clockwork."

Free and open to the public Followed by a reception in the Great Hall

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