

September 15, 2021
MSE 2101 topics

- 1453: the fall of Constantinople (Istanbul)
- 1543: Copernican revolution
 - Alphonso X: “*If I had been present at the creation, I would have recommended a simpler design for the Universe.*”
 - a quest for a better way to predict planetary locations
 - Copernicus' work still inaccurate in predicting; why?
- 1580: Tycho Brahe – exquisite precision in observational data
- 1593: Giordano Bruno – non-centric Universe, stars are suns
- 1619: Johannes Kepler; Kepler's laws of planetary motion
- Objections, and how Galileo resolved them
 - inertia
 - perfect, unchanging heavens
 - @#\$%@ stellar parallax
- 1633: The Trial of Galileo – can science and religion coexist?
- 1687: Newton's *Principia* brings everything together
- The Hallmarks of science:
 - ditch supernatural!
 - create testable models for which Occam’s razor applies!
 - test predictions, revise, abandon if faulty!
- Science vs. pseudoscience