## January 22, 2019 MSE 2103 topics

- The disadvantage of astronomy: uberlarge distances
- Emerging patterns: stars follow rules, laws *universalities*
- How old is the Universe? Consistency above all!
- Ages in a nutshell:
  - meteorites 4.56 billion years
  - oldest white dwarfs 12.7 billion years
  - oldest globular clusters 13.4 billion years
  - expansion of the Universe 13.5 billion years
  - maps of the Big Bang 13.7 billion years
- Aristotle's Eternity from dynamical perfection; *telos*
- Eternity might not be that long after all: Biblical Chronology

• Rabbi Halafta's *Anno mundi*: Julius Africanus' *Anno Adam*:

- AM 0: God made Adam - AA 0: God made Adam

- AM 1656: Noah's arc - AA 2262: Noah's Arc

- AM 2448: Exodus - AA 3707: Exodus

- AM 5778: today - AA 7519: today

## Bishop Eusebius' Chronicle:

- AA 0: God made Adam

- AA 2262: Noah's Arc

- AA 3689: Exodus

- AA 7501: today

- Reverend John Lightfoot, 1642, Bishop Ussher, 1650:
  - 9AM on Sunday, Oct 23 4004 BC: Man was created
  - sunset on Saturday, Oct 22 4004 BC: Genesis
- Astronomers corroborate: 3993BC (Kepler), 3998BC (Newton)
- So what version/translation of the Bible is correct?
- Unanswerable questions:
  - Was Adam the *first* man?
  - Did Earth exist prior to Creation?
  - How to reconcile Biblical Chronography with other tests?
- Hutton's paradigm
- Can science and religion co-exist peacefully?