

Lecture 1: Our Place in the Universe

Slide 2: "Cosmological Setting"

What distance does an Astronomical Unit (AU) measure?

What is the definition of a light year?

Slides 3 & 4: "Your World in Context" and "Distance in light time"

What are the six fundamental structures in the universe (as labeled on the slide)?

What are the typical sizes of and number of objects in each structure?

What is the "cosmic web"?

What is "look back time"? (why do we see distant objects as they were in the past?)

Slide 5 & 6 "Representative Slice" and "Cluster of Galaxies"

What does this slide illustrate?

What type of structure is at the intersections of the filaments in the cosmic web?

What are the typical sizes of these structures?

How big are they (typically) compared to the size of the "visible" universe?

Slide 7 Zoom in of "local" universe"

Where is our galaxy located in the universe relative to the Virgo Cluster?

What is the name of the region of space where our galaxy is located?

Slide 8 The Local Group

What is the largest object in the Local Group?

How far away is this object?

Slide 9: History of Cosmic Evolution

What are the six major stages of the evolution of the universe?

Approximately how old is the universe?

Slide 10: Video

What is this movie showing?