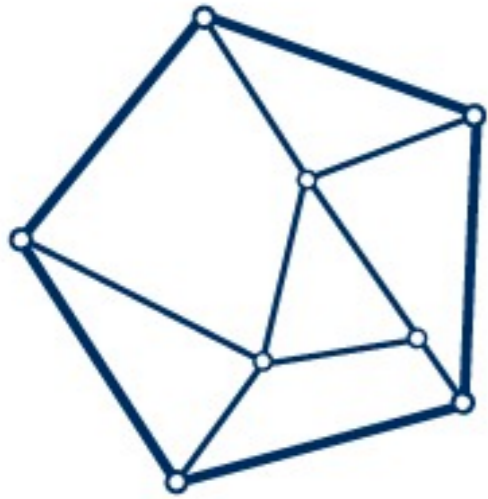


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CAASTRO in the Classroom

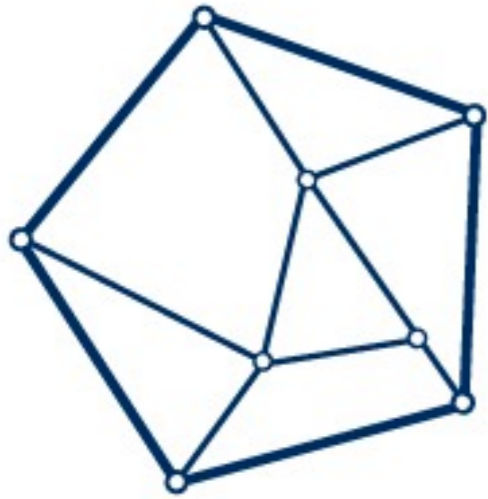
Ben McKinley

Australian National University



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Being a Scientist...



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How Big is the Universe?

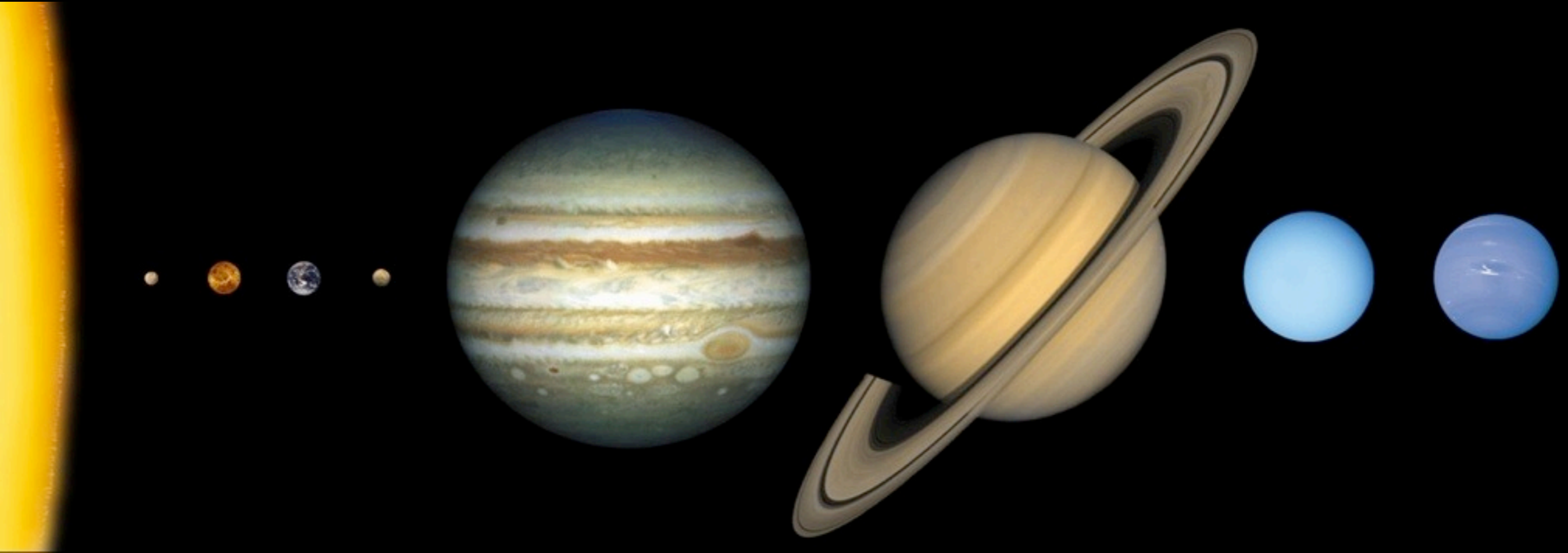
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Earth and Moon




Solar System



Nearby Stars

0.1°

A dense field of multi-colored stars, likely from a star catalog, showing a wide variety of colors including red, orange, yellow, green, blue, and purple. The stars are scattered across a dark background. A scale bar at the bottom left indicates a distance of 0.1 degrees.

Our Galaxy



Lots of Nothing much

The Local Group

The image features a dark, star-filled night sky as a background. The stars are of various sizes and brightness, creating a dense field of light points. In the upper right quadrant, there is a prominent, bright, blueish-white nebula or star cluster. Another similar, though less intense, feature is visible in the lower left quadrant. The overall scene is a vast, deep-space view of the Local Group of galaxies.

Even more Nothing
much

Distant Galaxies

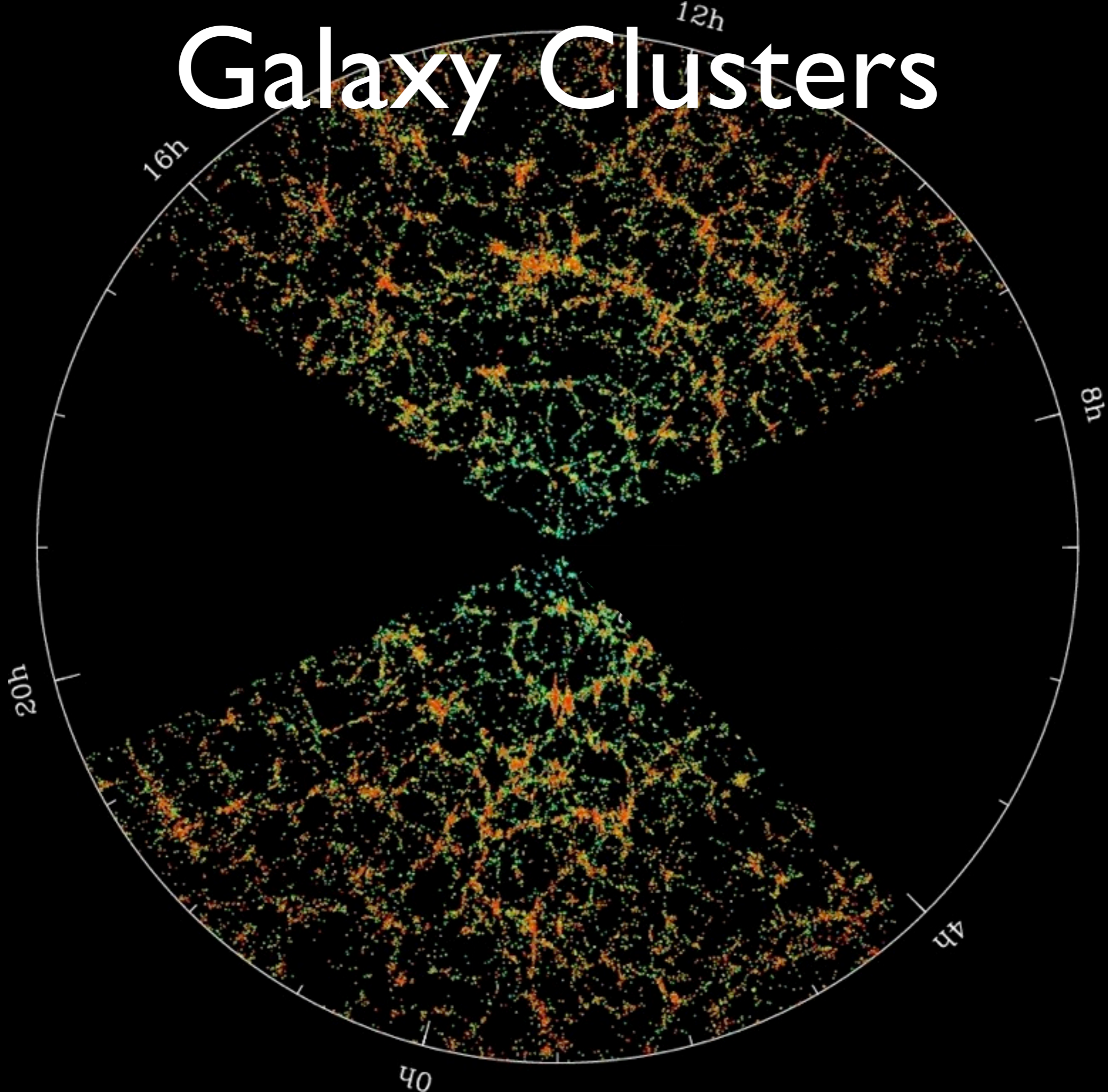


Hubble Deep Field

ST ScI OPO January 15, 1996 R. Williams and the HDF Team (ST ScI) and NASA

HST WFC2

Galaxy Clusters



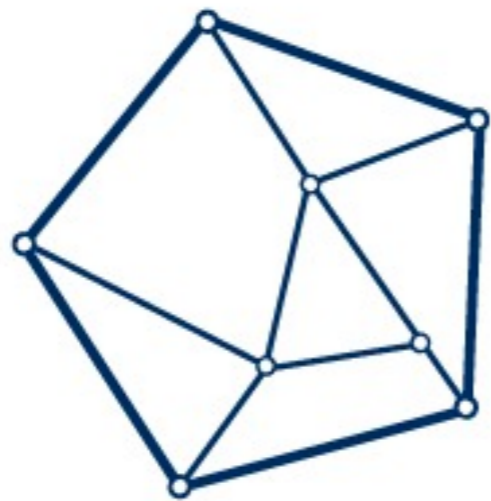
The Furthest Objects



So How Big is the
Universe?

... it's pretty big

And that's just the
observable universe!



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Questions?
...and hopefully Answers

Want to know more?

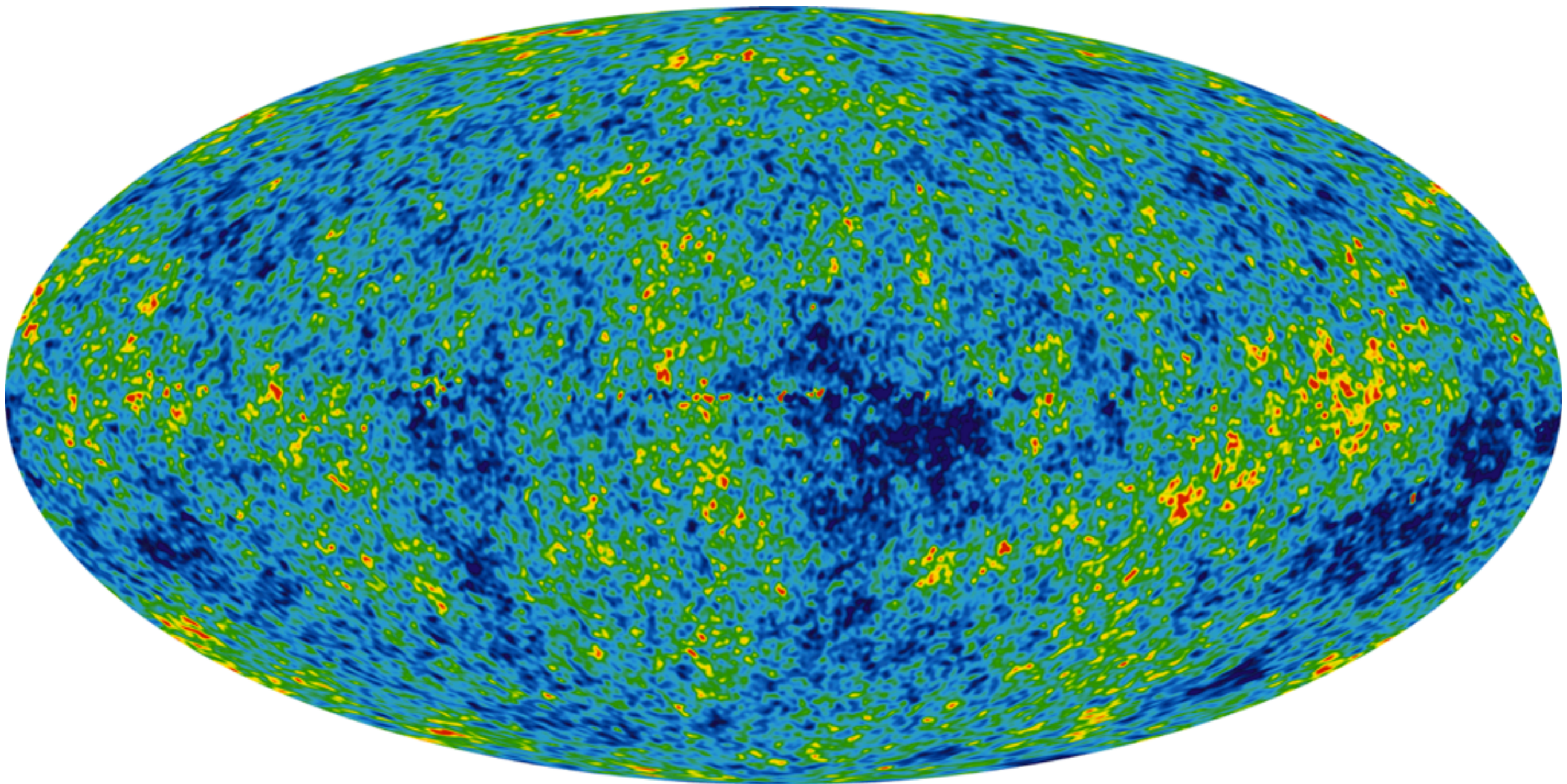
Google:

Extreme Cosmos (book)

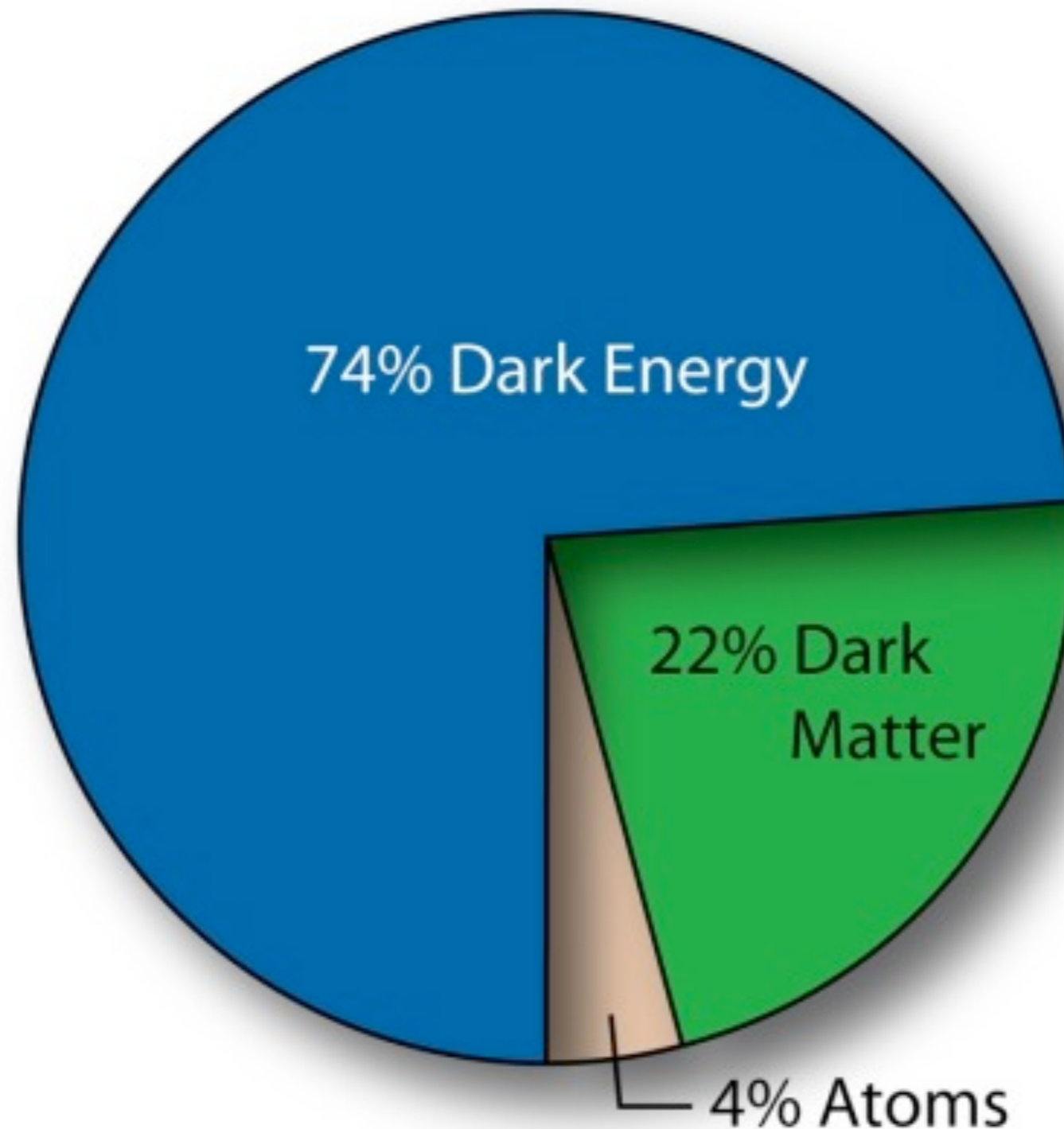
Cosmic Distance Ladder (wikipedia article)

Extra slides

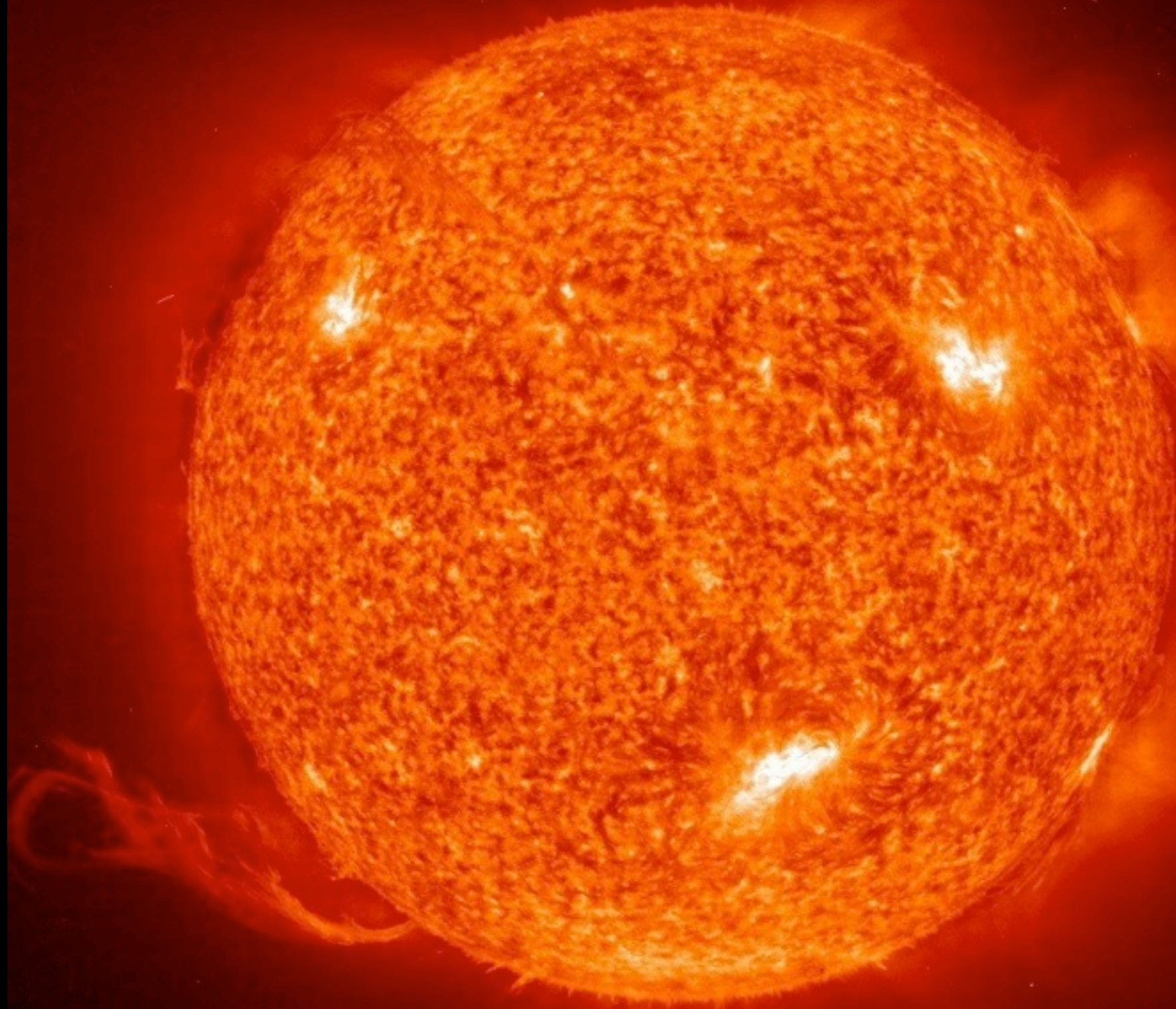
The Early Universe



And that's just the stuff
we can see!



The Sun



Extragalactic Distance Ladder

