ANNOUNCEMENTS

- RESEARCH PAPERS **DUE TODAY** !! HARD COPY TO ME. E-COPY TO BOBBY WALLACE AT: wallacer@colorado.edu.

- FINAL EXAM ONE WEEK FROM TODAY IN BENSON 180 1:30—4:00pm. One sheet of notes allowed and use of a calculator (no cellphones please!)

- EXAM REVIEWS NEXT TUESDAY AND WEDNESDAY 3-5pm IN D142 IN DUANE (HW CLUB LOCATION).

- **TODAY: MODERN SKIES** !

- **ENJOY THE WINTER SOLSTICE SEASON** !
Modern Cosmology & Cosmogony

- **SIZE:** Our universe is unimaginably large ... stretching 13.7 billion years back into time (the “Big Bang”) and > 13.7 billion-light-years in space.

- **EVOLUTION:** We can trace our origins back to the creation of space and time, matter, energy and light in the Big Bang. {Neil Tyson clip}

- **CONSCIOUSNESS?** When did it arise and how? It is human consciousness that has developed modern cosmology & cosmogony... a circular argument? {Huston Smith quote}

- **BELIEF & REASON:** Is there a place for ancient wisdom traditions in the modern world? {George Coyne clip} In the future we will be among the ancients.

  - “Religion without science is blind; science without religion is lame” Albert Einstein
TELESCOPES ARE “TIME MACHINES”
the further we look out into space the further we look back into time.

{Tour of “nearby space”}
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- **CONSCIOUSNESS?** WHEN DID IT ARISE AND HOW? IT IS HUMAN CONSCIOUSNESS THAT HAS DEVELOPED MODERN COSMOLOGY & COSMOGONY... a circular argument? {Huston Smith quote}

- **BELIEF & REASON:** IS THERE A PLACE FOR ANCIENT WISDOM TRADITIONS IN THE MODERN WORLD? {George Coyne clip} In the future we will be among the ancients.

  - “RELIGION WITHOUT SCIENCE IS BLIND; SCIENCE WITHOUT RELIGION IS LAME” ALBERT EINSTEIN
“While Mona Lisas and Mad Hatters; Sons of bankers, sons of lawyers; Turn around and say good morning to the night For unless they see the sky; But they can't and that is why They know not if it's dark outside or light” sung by Elton John
“In Florida, artificial lights have had a disastrous impact on sea turtle populations. During the summer and the early fall, hatchlings, which emerge primarily at night from nests on Florida beaches, are often fatally attracted to street lights, house lights and other sources of artificial illumination, dying after being drawn into open areas, where they are easily attacked by predators, or onto roads. The problem is that newborn sea turtles instinctively move toward the brightest part of the horizon... which, for millions of years, would have been not shopping malls and beach houses, but the night sky over the open sea.”
David Owen in the *New Yorker* magazine, Aug 20, 2007
{The City Dark video clip}
WITH ALL THESE LIGHTS....

IS THERE STILL MAGIC TO BE FOUND IN THE MODERN WORLD?

WHILE THERE MAY BE MAGIC IN THE “CIVILIZED WORLD” OF CITIES, THERE IS A DIFFERENT LEVEL OF MAGIC STILL PRESENT IN THE NATURAL WORLD.

{City Dark clip #2}
{“SPELL OF THE SENSUOUS” David Abram quote}
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“The thing white folks don’t understand about the DREAMTIME is that it is a DREAMING.” Bill Harney

→ THE SPIRITUAL BASIS OF THE WORLD CONTINUES TO THE PRESENT
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WITH ALL THIS SCIENCE AND TECHNOLOGY....

IS THERE STILL MAGIC TO BE FOUND IN THE MODERN WORLD?

- WHAT IS A HUMAN BEING, our Life, our consciousness?
- WHAT IS OUR PURPOSE TO BE LIVING AS CONSCIOUS BEINGS IN THIS WORLD?
- HOW IS THERE LOVE?
- WHY IS THERE ANYTHING AT ALL?

“OUR LIFE IS BUT A FAINT TRACING ON THE SURFACE OF A DEEP MYSTERY”...Annie Dillard