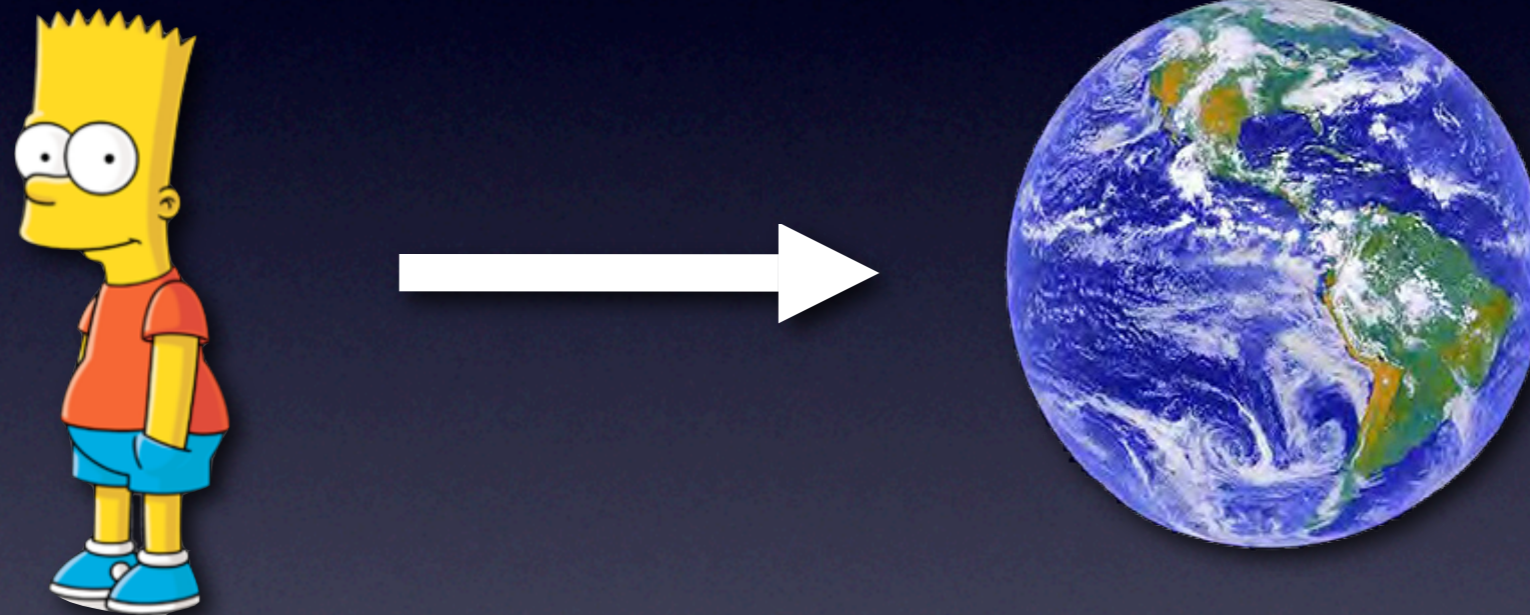


Driving Ideas

- **Unexplored** external world is closer than we realize
 - governed by same physical principles
 - data available, but often not readily
- Randomness begets pattern
- Personal sense of (cosmology = mythology)
- increasing access

The radius of Earth is 6.0×10^6 meters

3,000,000 people stack together



The height of a person is about 1.7 meters

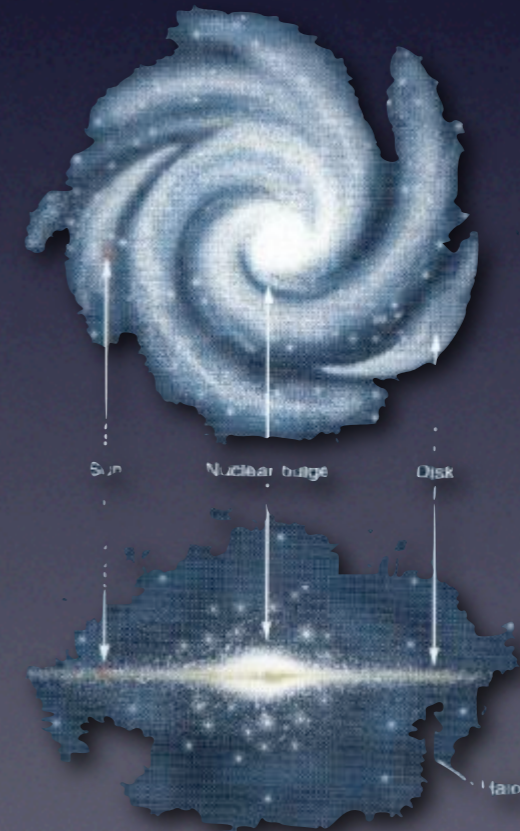
The Milky way galaxy is

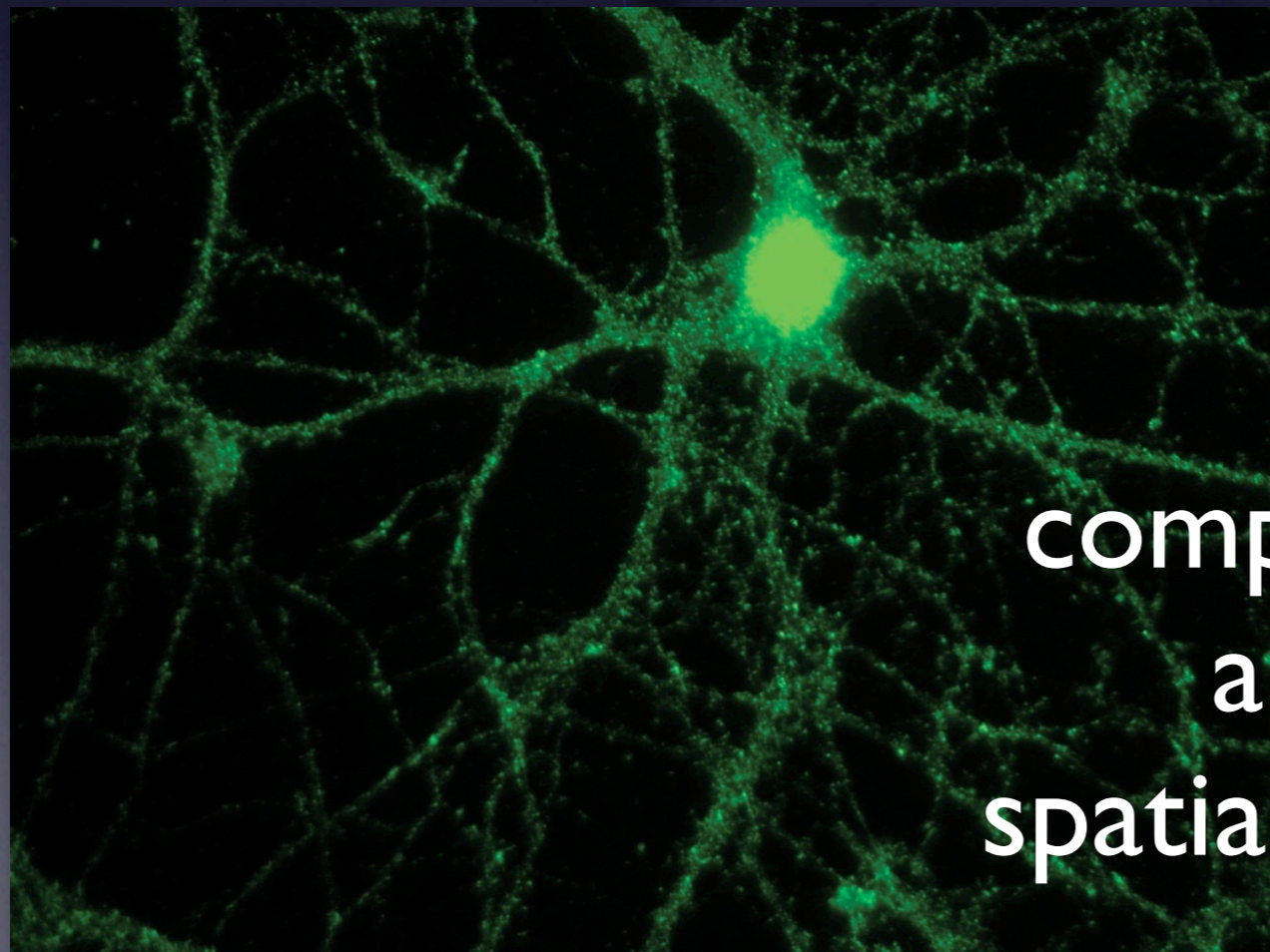
$\sim 10^{20}$

10,000,000,000,000,000,000

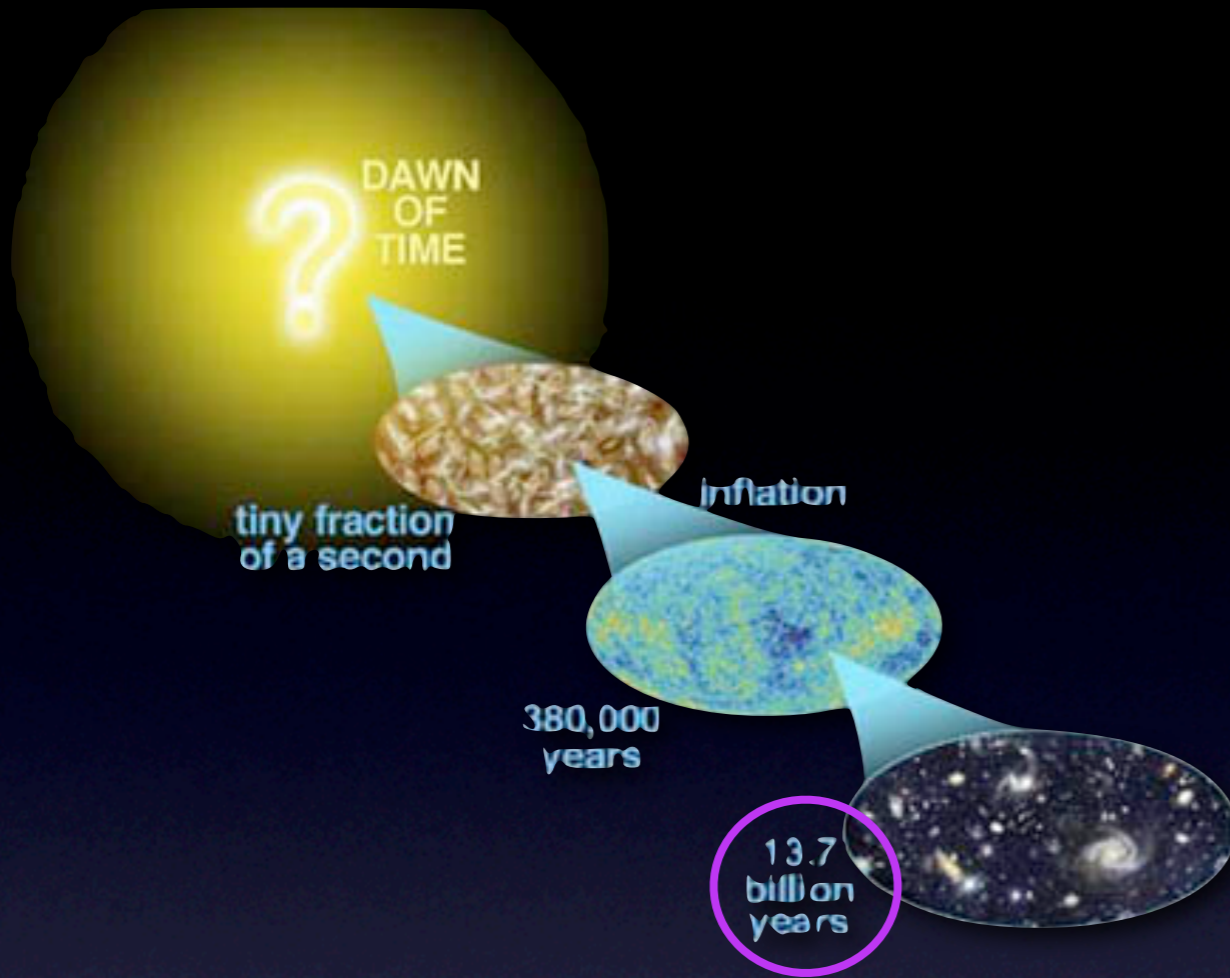
10 million billion

times bigger than Earth

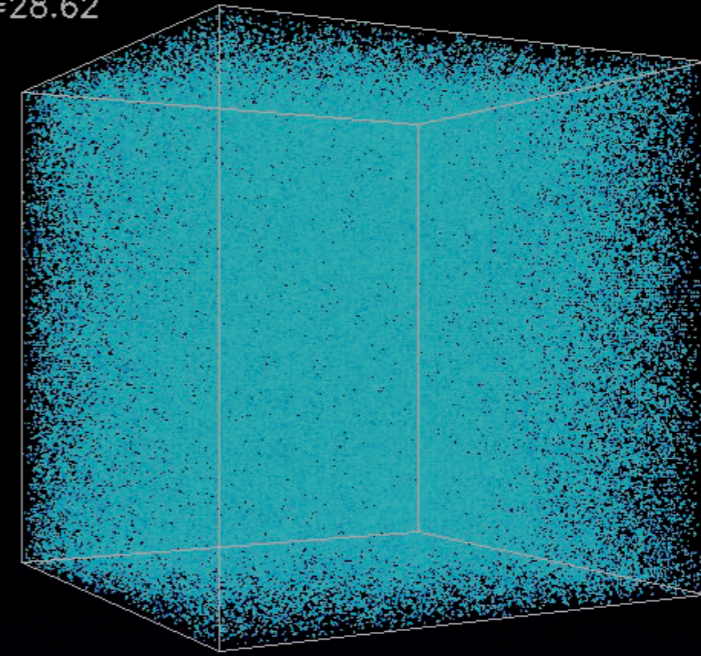




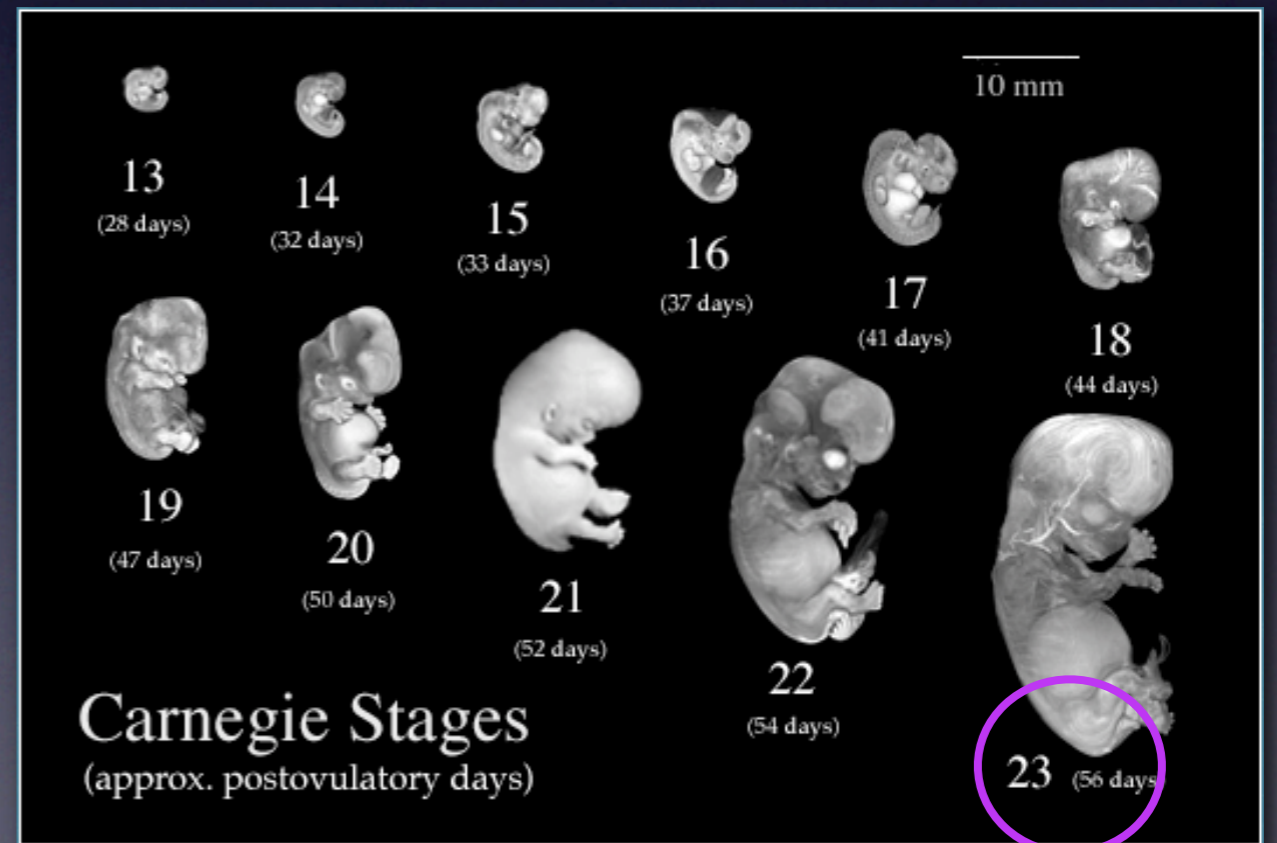
complexity
and
spatial scales



Z=28.62



temporal and structural development



Goal

- To make visceral the cosmic events that ensconce our personal view of the universe.
- place *some* creative control in the hands of the individual
- scales of space and time
- *~faithfully* re-cast physical principles to relate to senses

Complete

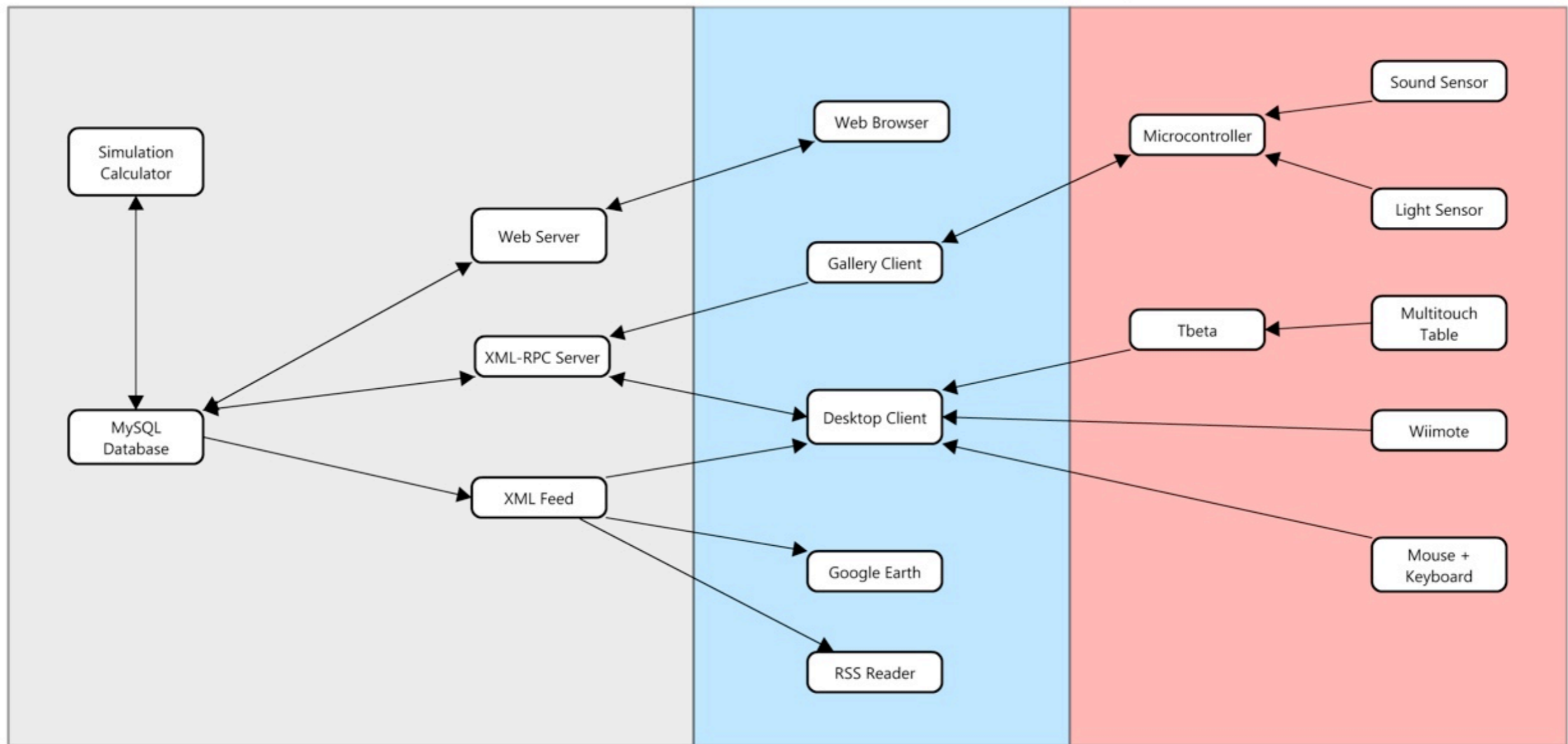
- MultiTouch Table
- Server and Client Software Version 0.1
- User Interface Version 0.1
- Re-interpretation of a physical principle
 - Gravitational Lensing

August 23, 1966 - A Parallel Universe

Server

Clients

Input



Next Steps

- Develop simulation software
- Develop interface
- More re-interpretations of physical phenomena *
- visuals
- sound of space and structure
- enveloping environment
- use external (but Earthly) phenomena to impact simulation

Questions

- what is the most significant barrier to your exploration of astronomical phenomena?
- For a particular demo, how should the value-added information be presented to give it the necessary depth?
- If you're somebody who's written off astronomy, was there maybe just one thing in the last year that piqued your curiosity?