

# The Spinning Spheres Model of the Universe

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# 1 Introduction

In the history of physics having the correct point-of-view is very powerful. Changing a point-of-view leads to fundamental changes in the understanding of a situation.

Consider the opposing point-of-views between the world being flat or the world being round. To a local observer, it is hard to distinguish between these views. Only the experiment of sailing around the world established the round earth model.

Consider another opposing point-of-view between the sun or the earth as the center of the solar system. Again, to a local observer, it is difficult to distinguish between these views. Only the careful observations of planetary motion established the sun-centric solar system model.

My contention is that the universe is a rotating sphere of multiple space and time dimensions. From a local observer, the universe appears to have been created with a big bang followed by an expansion where time is monotonically increasing. The local observations are confined to a limiting project of the universe.

## 2 A Simple Model

Consider a simple two dimensional version of a spinning sphere: a spinning disk in one space and one time dimension. Also consider that the local observer's motion of the universe is confined to the space dimension and that time is a sensation but not a dimension of transverse. See Figure 1 on page 4.

### Spinning Disk in one Space and Time Dimension

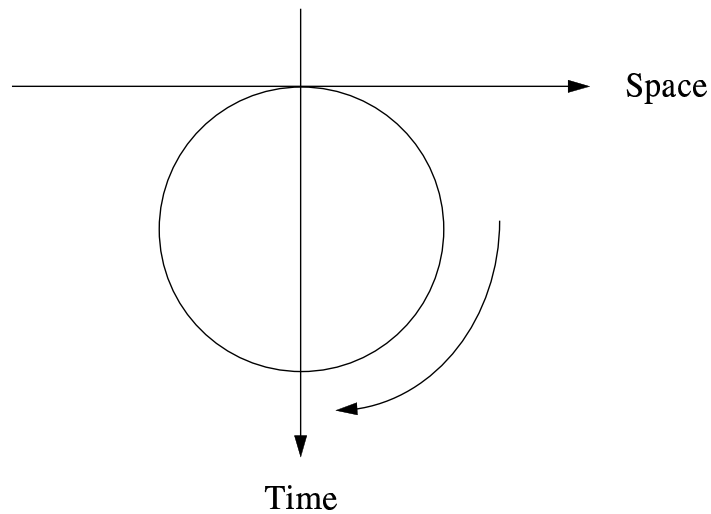


Figure 1: Spinning Disk Universe

The universe is spinning disk. There is no big bang nor expansion. The universe cycles through positive space and time and then through negative space and time.

To the local observer another story unfolds. See Figure 1 on page 5. When the universe is at position 1, from the prospective of the local observer, the big bang has just occurred. The universe has near zero space component

and time of zero. As the universe turns, from the prospective of the local observer, the universe appears to expand and time monotonically changes. This continues until the universe reaches position 3. Now the universe is at maximum expansion and starts to contract while time still monotonically changes. At position 5 the universe would appear to end with a new big bang and expansion cycle.

### The Big Bang Projection

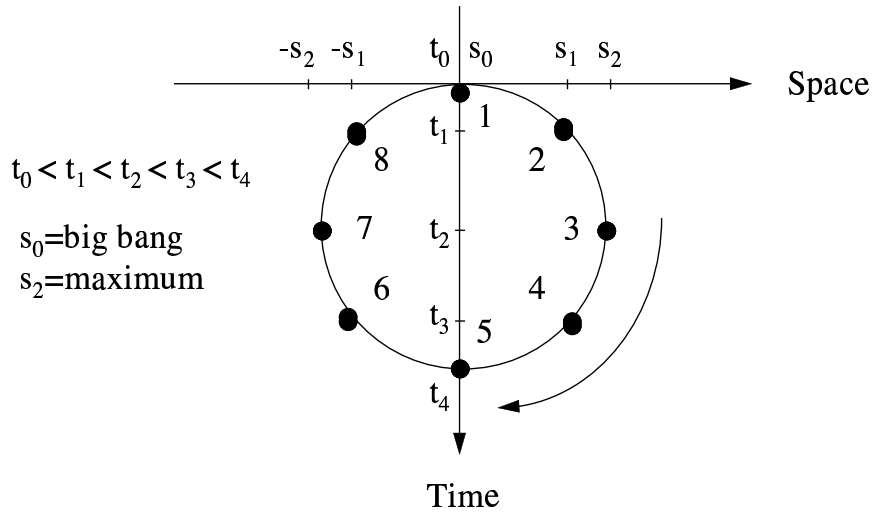


Figure 2: The Big Band Projection

Here time is monotonic

$$t_0 < t_1 < t_2 < t_3 < t_4$$

while space has a start,  $s_0$ , and a maximal size,  $s_3$ .

The universe may have many space and time dimensions in this model.

### 3 Predictions

If the spinning sphere model of the universe holds then several observations must also hold.

- Time and space are grainy and non-uniform.
- The same way that energy and mass dance, time and space must be tightly coupled into the ultimate slow dance.
- Space and time should have a relationship something like,

$$time^2 + space^2 = constant^2$$

- Consider a space-time equation of

$$x^2 - t^2 = c^2$$

Take the first derivative and simplify

$$\frac{dx}{dt} = \frac{t}{x}$$

The velocity is proportional to time and inversely proportional to space. Take the second derivative and simplify

$$x \frac{d^2x}{dt^2} + \left(\frac{dx}{dt}\right)^2 = 1$$

Setting the second derivative to zero yields

$$\left(\frac{dx}{dt}\right)^2 = 1$$

This space-time equation predicts that maximum velocity of a constant value of 1.

- The universe has a fundamental frequency.
- The universe should be full of space-time eddies.
- The universe's center is not the same as the perceived big bang center. We should be able to observe this center by looking at angular velocity components.

## 4 Conclusions

The universe is a spinning space-time sphere. The local observations make it look like a big bang with monotonic time. Space and time are interrelated.