## 1. [Dark Matter is believed to be responsible for 85% of gravity](https://www.youtube.com/watch?v=N4x6N0uAkTQ) in the universe, and no one knows what it is or how it works.

According to Neil deGrasse Tyson, Dark Matter is the longest-standing unsolved mystery in modern astrophysics. Indeed, it might not even *be* matter! Basically, the amount of gravity in the universe doesn't quite equal the amount of observable mass – the planets, the stars, the galaxies, the comets, the black holes, and the dark clouds. So scientists propose there is a large measure of unobservable or "dark" mass in the universe, which is the source of all that gravity.

## 2. Time On Earth Moves Faster Than Time In Space

Due to time dilation - a precept of the theory of relativity referencing a difference in the elapsed time measured by two observers – astronauts stationed in outer space lose approximately [one second per week](http://www.dailymail.co.uk/sciencetech/article-2949168/Time-Earth-moves-SLOWER-space-Planet-s-orbit-sun-galaxy-gives-extra-second-WEEK.html). the spin of Earth, its orbit around the sun and the solar system’s motion around the Milky Way all combine to decrease the time we experience on Earth.

Though miniscule, this second-per-week dilation results in nearly a minute lost annually and more than 8.5 minutes lost each decade.

### 3. **There is a supermassive black hole at the heart of every galaxy**

Active galaxies often pump out 100 times more light than a normal galaxy. With the discovery in 1963 of quasars, it was clear that the light comes not from stars but from a central region smaller than the Solar System.

The only conceivable energy source is matter heated to incandescence as its swirls down onto a giant black hole up to 50 billion times the mass of the Sun.

In the 1990s, NASA’s Hubble Space Telescope found that, although active galaxies account for only about 1% of galaxies, supermassive black holes are no anomaly.

Almost every galaxy, including our Milky Way, contains one, but starved of a food supply, most have switched off.

What are supermassive black holes doing in the hearts of galaxies? Were they the seeds around which galaxies congealed? Or did new-born galaxies spawn them? These remain some of the biggest unsolved questions in astrophysics.

### 4. **Space Doesn’t Smell Great**

There is no sound in space. But turns out, it has a peculiar smell. But what is this odor feel like? Many astronauts described the space odor. Some said space smells like hot metal. Whereas some of them said that it smells like seared steak, welding fumes, or gun powder. Interesting, isn’t it?