



# Time Flies on an Alien World

April 30, 2014



Our Universe is constantly in motion. Not so long ago, Space Scoop explained that right this moment you're [hurtling through space](#) at hundreds of thousands of kilometres per hour! The Earth is moving, our Solar System is moving and even our Galaxy is gliding through space.

We use the movements of Earth through space define to measure time. We call the time it takes Earth to complete one full rotation a 'day'. A year is the time it takes Earth to complete one full orbit around the Sun.

But the length of one rotation and one orbit can be different on other planets. For example, one orbit (or 'year') on Mercury takes just 87 Earth days. This means Mercury orbits the Sun four times in every Earth year. So, if you were 10 years old on Earth, you'd be 40 years old on Mercury!

The length of day is also different on other planets. For example, one day on Jupiter lasts just 10 Earth hours. Astronomers have now measured the length of a day on a planet outside our Solar System (an exo-planet)!

Beta Pictoris b is a planet orbiting a distant star. The planet is 16 times larger than Earth, yet it has a day that lasts just 8 hours! This means the planet must be spinning through space at almost 100,000 kilometres per hour!

## **COOL FACT**

Beta Pictoris B is rotating much quicker than any planet in our Solar System. By comparison, Jupiter rotates at about 47 000 km per hour, while the Earth spins at only 1700 km per hour.

This Space Scoop is based on a Press Release from [ESO](#).  
[ESO](#)



This website was produced by funding from the European Community's Horizon 2020 Programme under grant agreement n° 638653