



Spinning Sun

It's no wonder our Solar System is named after the Sun. It is such an important feature, being the only star in our Solar System and containing nearly 99% of the Solar System's total mass. The Sun could hold 1.3 million Earths alone!

The Sun is an extremely hot ball of ionised gas (mostly hydrogen).

The Sun spins at different speeds at its equator compared to its poles. It spins once every 25 days at the equator and once every 36 days at the poles. Deep in its core, the Sun probably rotates every 27 days.

As the Sun spins, it distorts or bulges slightly around its equator and becomes oblate (slightly flattened at its poles). Scientists debate how large the bulge at the equator actually is, but they believe it is mostly caused by centrifugal force or angular momentum. Angular momentum is how easy or difficult it is to start or stop a spinning object such as the Sun.

The Sun even 'sings'. Go to <http://soi.stanford.edu/results/sounds.html> and listen to the Sun's sound, caused by vibrations emitted from its boiling gases.

More Information

Solar Views <http://www.solarviews.com/eng/sun.htm>

Scientific American Ask the Experts 4 January 1999
When a massive object--such as a star--spins, how is its gravitational field affected?
http://www.sciam.com/print_version.cfm?articleID=000758E6-3C7D-1C71-84A9809EC588EF21

How the Sun Works <http://science.howstuffworks.com/sun.htm/printable>

Stanford Solar Centre <http://solar-center.stanford.edu/index.html>