



Why your stars don't match your star sign.

By presenter Dara O Briain and astronomer Dr Radmila Topalovic.

DARA O BRIAIN:

To understand the zodiac you need to see the stars behind the Sun. They're normally too dim to see in daylight, although you might spot them during an eclipse.

At the moment Pisces takes pride of place. But as we orbit round the Sun, a different constellation appears behind it each month. Ancient astronomers named this ring the zodiac, meaning 'circle of animals'.

It was the Greeks who came up with the idea of the personal 'star sign' – character traits determined by the constellation behind the Sun on the day you were born.

The astrologers ran with this and that's where the problems started for the astronomers out there. Because the dates of the 'star signs' were fixed, over 2,000 years ago, when the zodiac was first devised.

And since then? Well things have changed a bit.

DR RADMILA TOPALOVIC:

The Earth is affected by the gravitational pull of the Moon and the Sun and they introduce a wobbling effect in the Earth.

That whole effect is called precession and the Earth itself behaves a little bit like a spinning top.

DARA O BRIAIN:

This spinning top completes a wobble every couple of seconds. The Earth is a little more cumbersome – it takes about 26,000 years.

The result is that since the signs were fixed, the constellations have drifted by a whole month.

DR RADMILA TOPALOVIC:

Let's say you were born towards the end of January, this would mean that the Sun should be in the constellation of Aquarius. But in actual fact if you look at where the Sun is on the day of your

birthday, you would see that it's not in Aquarius at all, it's the neighbouring constellation of Capricorn.

DARA O BRIAIN:

So now your 'star-sign' is not the constellation behind the Sun on the day of your birth.