close by the Sun might be bent?

The experiment in the laboratory of the universe went ahead when there was a favourable eclipse in 1919, the year following the end of the war. Photographs taken during the eclipse were compared to photographs taken previously at night and sure enough, the stars seen near to the Sun appeared in slightly different positions relative to each other and more importantly, shifted by as much as Einstein's formulas predicted!

When we look out into space now with sensitive telescopes, we can see that massive bodies, like a cluster of hundreds of galaxies with a total mass of 100 million million suns, bend light. Like a glass lens, the curved space around the massive object warps the image coming from objects way beyond the 'lens'. Astronomers measure the distortion and use that information to cleverly calculate how massive the object is that creates the gravitational lens. Sometimes the object turns out to be a black hole. Mathematics is the key to answers about the universe.

Yes You Can

Which stars were used to prove Einstein's theory of relativity? Yes – you can see these historically important stars. Using a star map, look for Taurus the Bull. This chart shows the constellation the way it is orientated when due north.

Double the distance between the eyes of the bull downwards. Slightly to the right are the stars which were used in that famous experiment.

Hint: Taurus is directly north of you and about 45° above the horizon at 20h00 at the end of January each year, but you can see it somewhere north throughout the summer.