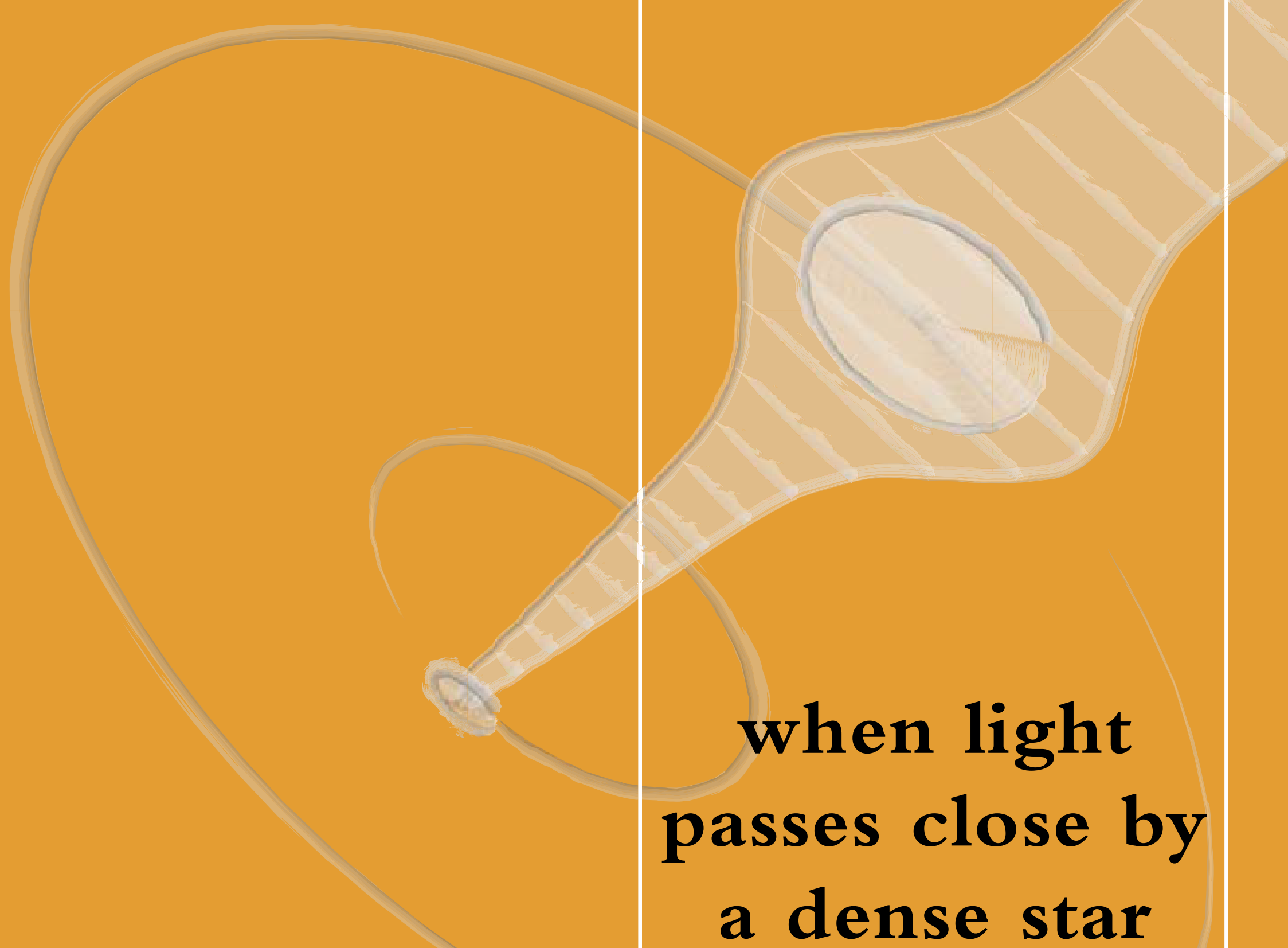
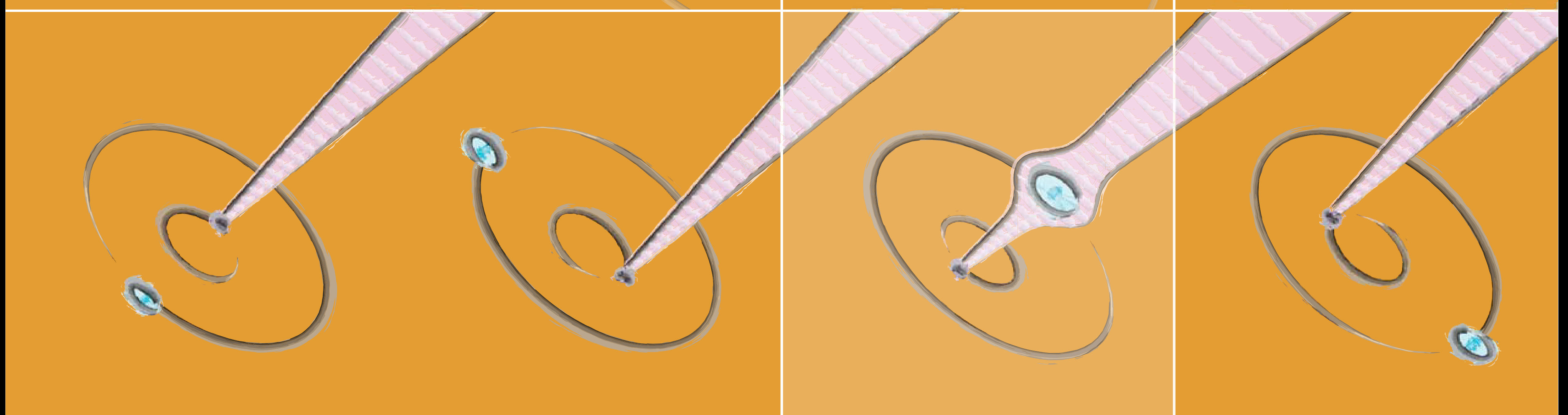


SEE EXTREME STARS STRETCH THE FABRIC OF SPACE-TIME



when light
passes close by
a dense star

The diagram shows a light beam, represented by a series of parallel lines, passing near a central point representing a star. The beam is deflected away from the star, following a curved path. The background is a solid orange color.



we can see
gravity
slow it down

A sequence of four panels showing a light beam passing near a star. The beam is deflected away from the star, following a curved path. The background is a solid orange color.

Shapiro delay in PSR J1802-2124. Pulsars and white dwarfs are extremely massive and compact. Their density and gravitational pull are gigantic, stretching both space and time in their vicinity. When you look at a radio pulsar passing behind a white dwarf, you can actually see its light slow down as it struggles past the white dwarf. Original data: *ApJ*, 711, 764, Fig. 2

ASTRON

Netherlands Institute for Radio Astronomy

