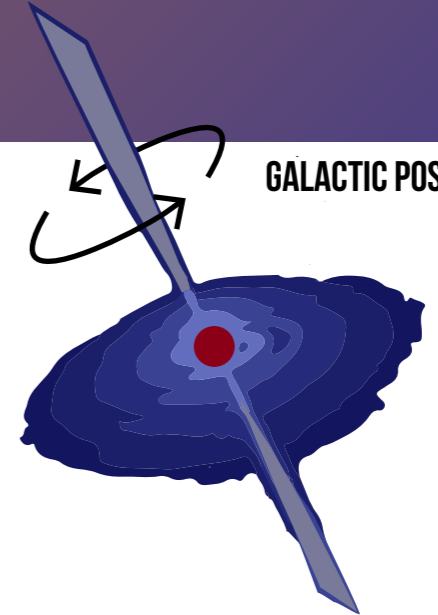
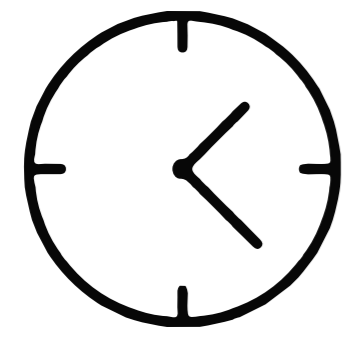


X-RAY RADIATION FROM PULSARS



GALACTIC POSITIONING SYSTEM

X-RAY NAVIGATION



The pulses of pulsars can be used to count time since they can be accurately predicted down to the microsecond for years into the future. Since astronomers know where these pulsars are located, they can be used much like GPS signals, providing both time and a reference location for spacecraft outside the near-Earth region.