

Abstract

Binary stars represent about half of the stars in the sky and roughly two thirds of stars similar to the Sun have a companion, so studying these stars is crucial to our understanding of stellar evolution. The aim of this experiment is to investigate the binary nature of stars which can not be visually separated and to determine if they are spectroscopic binaries. During this experiment it was proved that HD4058 (Pi Cas) has periodic shifts in the hydrogen alpha line, thus giving evidence that it is a binary star system.