The energy relationship between close binary star system Cygnus X-1 and its companion star.

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Cygnus X-1 is a close binary star system, one is a black hole and the other is a companion star. Minoru Oda explained that Cygnus X-1 is sure to a black hole when black hole had been a theoretical result. That is to say, black hole astrophysics was a mysterious box opened by Cygnus X-1.
By the way, what is a close binary star system? It is a binary star system which interacts with each other. The reason why he found Cygnus X-1 is a black hole was that Cygnus X-1 is a close binary star system.Usually, we cannot observe black hole by visible light, but in this case, thanks to a massive giant companion star, we are able to observe light released from the black hole by gas friction.
I show that the energy relationship between Cygnus X-1 and its companion star.
In order to calculate all energy per unit mass, I use specific data taken from literature.
Then, I utilize routine kinetic energy, gravitational potential energy, and condition for the equilibrium of two forces: centrifugal force and gravity are equal.

Keywords: black hole, close binary star system , Cygnus X-1

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