

Rare Earth

Ward and Brownlee

The book is quite interesting. One concludes that there is a high likelihood that we are alone in the universe. It is awesome to think that the universe is an empty desert except for this oddity we live on.

I did have a question about how the moon was formed as given in the book and elsewhere. I have seen several explanations of the origin of the moon as a result of a collision with a planet the size of Mars or larger. The problem I see, that is never addressed, is why the earth's orbit is fairly circular after such a collision. I take it Earth absorbed most of the momentum of the colliding object. I would think this would do something to its orbit. Where was Earth in relation to the Sun before and after the collision? Was the colliding object the same approximate distance from the Sun as the Earth? If so, how was it rotating around the Sun with respect to Earth? I am sure those who have done the computer simulations have worked all this out. Share it with us.

My comments on evolution are given under "General Comments".

As for being alone in the universe, it is only a problem for the central bankers who will just have to be satisfied with Earth.