

# Homework Assignment 5

## There is a dark side of the moon

"I'll see you on the dark side on the moon" This a famous phrase from Pink Floyds song Brain Damage (1973). When I was young, and maybe because of this song, I thought this was true. That there was indeed a 'dark side' of the moon which is always dark and never sees the sun. However, this is just some cool sounding misnomer (Gonzales, 2019). It is only 'dark' to us, as it is the part of the hemisphere that we can never view from Earth, but in reality, it equally sees the sun as the rest of the moon. Therefore, It should instead be called the 'far side' of the moon (Ma, 2019).

Now let us do a little experiment to explain that the moon's far side is not permanently out of the reach of the sun. Imagine putting a bottle in the middle of the room. The bottle is now the Earth, and you will act as the moon. For that, try to slowly walk around the bottle while you always look directly at it. Note how you have to turn your body and head to keep facing the bottle. The moon does the same thing. At any moment, you can only see the background behind the bottle, but not the area behind you. To do that, you have to turn half a circle around the bottle. Your back feels probably very 'dark' because it never faces the bottle. Now imagine that the window is the sun. When you walk around, there is a moment that the window will be behind you, and the light coming from it will shine on your back. The light demonstrates that the moon's dark side will face the sun every lunar month (Cain, 2015). This little experiment shows that the 'far side' of the moon is not just always dark (Mosher, 2019).

### References

Cain, F. (2015, December 25). *Lunar Month*. Universe Today.

Gonzalez, R. (2019, January 5). *What Is the Dark Side of the Moon?* Wired.

Ma, C. (2015, May 8). *Mythbusters: Is There Really a Dark Side of the Moon?* Yale Scientific Magazine.

Mosher, D. 05 jan. (2019, January 5). *There is a 'dark side' of the moon, but you are probably using the term incorrectly all of the time*. Business Insider Nederland.