

Model Images for Regolith Light Scattering

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Abstract

Model images show that the roughness degree of regolith, as well as of other materials, does not determine their light scattering properties.

Fig-1 shows a smooth glass cup filled with milk, Fig-2 shows an egg with fine rough surface, and Fig-3 shows a tennis ball with a coarse rough surface. More images are in https://www.researchgate.net/publication/358403822_Magic_Balls . The photos were taken with a flash in a dark room with a dark background. The photos look similar and they do not depend on the roughness level of the surface. There are no images, neither celestial, nor terrestrial, that obey Lambert's Cosine law. The only images that do obey the law, are rendered, images that are at least partly simulated.



Fig-1: A glass cup with milk

Fig-2: An egg

Fig-3: A tennis ball

The text and photos are cited from

https://www.researchgate.net/publication/364336618_Scattering_of_Directional_Light

https://urila.tripod.com/Model_Images.htm

Some References

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