

Terraforming Mars

Hello everyone, space flight is dominating news cycles once again. Recently, Space-X has launched humans to the space station. Besides that, the Emirati's launched their own mission to Mars. Thus, it is no surprise that questions on creating a Martian atmosphere abound.

Luckily, I was able to participate and watch a lecture on terraforming Mars. Dr. Rob Lillis was the presenter; and he went into a technical overview of what was necessary to create such an atmosphere. Dr. Lillis first described the Martian atmosphere as "very thin." He would also describe Mars's sky as "salmon pink because of the dust in the atmosphere." After that, Dr. Lillis elaborated on Mars's atmosphere in the past. According to the scientific record, it was originally much thicker. It was theorized that Mars lost its atmosphere due to solar cycles which released atmosphere over a long period of time. Also, I cannot forget that Mars receives between 50 and 65% of the sunlight on Earth.

Once Dr. Lillis laid the groundwork for recreating a Martian atmosphere, he broke down the process for creating it. Naturally, it was assumed that in order for humans to live on Mars, they would need an atmosphere similar to that of Earth. This is incredible considering that the volume of Earth's atmosphere above every one square meter weighs 10 tons. Dr. Lillis's first suggestion for creating an atmosphere was to melt all of the dry ice (CO_2) at the South Pole of Mars. Dr. Lillis stated that 1 million billion tons of rock would need to be vaporized. I honestly did not fully understand his reasoning for vaporizing so much rock; however, if he says it is necessary then I believe him. After that, the lecture went over the idea that Mars would need the greenhouse effect to warm it up. Last but not least, Dr. Lillis discussed capturing comets to bring water to Mars. Overall, I found Dr. Lillis's lecture on terraforming Mars to be fascinating. Undoubtedly, much effort would be required to make this mission come true.