By Catalin Cimpanu, Science News Editor

Covering Half the Moon with Mirrors Should Draw ET's Attention

And help electric energy generation

Scientists have often wondered why the universe appears to be so 'quiet'. We're not yet sure if intelligent alien life exists in our galaxy, although our math puts it very simple and clear. We're not alone in the universe. So where is everybody then? There are two possible answers for this question. Either any intelligent being is too far away to make contact, or they're all in the neighborhood and they're doing the same thing we are: always listening for other alien transmissions, but never really transmitting anything ourselves. We've been unintentionally sending radio and television transmissions into the universe for more than a century now and yet chances are that nobody will ever pick them up. Surely you remember when NASA transmitted the Beatles "Across the Universe" song in February this year. The transmission was directed towards the Polaris star, or the North Star, located some 431light years away from Earth. By the time the signal gets there it will be so weak, any intelligent race detecting it will probably be unable to distinguish it from background noise.So what can we do? Do we keep looking at the sky until the end of time, hopping that someone will come to Earth? Probably not, since that's not in our nature. Pennsylvania State University researchers Shawn Domagak-Goldman and Jacob Haqq-Misra for example, propose that we build a giant light reflector spanning about half the surface of the Moon. By doing so, the light reflected by the Earth-Moon system will enhance by over 20 percent, enough to be detected by an alien race. Alternatively, the mirror array could be used to send coded messages, such as a prime number of flashes, so that it is not confused to a naturally occurring event. Additionally, the backside of the mirror could be covered by photovoltaic cells, thus when the mirror array is not used it can generate electric energy and relay it to Earth through microwave radiation. Microwave converters on the planet surface would capture the microwave emission and convert it back into electric energy. "You could help solve the climate crisis, too", says Domagal-Goldman.