

Messenger from the invisible universe

Contributed by Daniel Marin
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For the development of our theories, we perform experiments focused on the detection of very elusive particles or on the observation of very rare phenomena. The results can shed new light on our understanding of the Universe, but their detection is a real challenge. Trillions of neutrinos, for instance, go through our body every second without stopping. This means that very few events will be recorded in our detectors, in some cases only a few per year! So any spurious signal, induced, for instance, by particles generated in the cosmic ray showers may overpower the expected signals in the same way sunlight hides stars during the day. We can get a "cosmic night" by going underground or undersea, where cosmic rays are mostly absorbed.

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Ghost particles

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Very rare phenomena

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Neptune's Kingdom