SEMINAR IN PHYSICS

Friday, April 5 3:30 – 4:45 Ross 0220

Pyramids Unlocked: Using Cosmic Rays to Detect Hidden Rooms

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Cosmic rays shower the earth's atmosphere every day. As the cosmic rays enter they collide with molecules such as oxygen and nitrogen, producing showers of lighter particles which then react or decay further until they eventually reach the earth's surface.

Muons are the particles that can make it to the surface and therefore can be detected. Using muon detection provides data to locate hidden or inaccessible rooms in ancient pyramids. As muons pass through material, lower energy muons become captured by the material. Therefore, fewer muons should be detected in a solid stone than a hollow stone. Muon detectors placed inside and under pyramids provide data to create a structural layout of the pyramid. Experiments have shown this method works well and accurately.

Perhaps more experiments could be done to solve mysteries and knowledge of the past.

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