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## **The lunar Cherenkov technique - answering the unanswered questions.**

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The lunar Cherenkov technique, by which (currently Earth-based) radio-telescopes observe the Moon to look for UHE cosmic ray and neutrino interactions in the lunar regolith, is a promising method for probing the very highest energy fluxes of these particles. However, predictions about the sensitivity of the technique tend to gloss over a number of important unknowns. How deep is the Moon's regolith, the nominal detection medium? Can we detect near-surface cascades (i.e. cosmic rays), or is the emission suppressed? What role does lunar surface roughness on both large and small scales play? In this talk I review these issues and their implication for detection experiments, and present the latest work to resolve (and in some cases, resolving) each of these issues.

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