

Executive Summary: Broadband RF Phased Array Design for UHE neutrino detection

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In this poster presentation, we discuss computational electromagnetics (CEM) results that model radio-frequency phased arrays for UHE neutrino detection via the Askaryan effect. The results show that CEM codes typically used for micrometer wavelength systems can be repurposed for radio-frequency designs. The phased array designs presented in this proceeding match theoretical expectations without requiring complex proprietary software. Finally, the results take advantage of the CEM features to account for the spatially varying index of refraction of the medium.