

Abstract Submitted  
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**The Radar Echo Telescope for Cosmic Rays**<sup>1</sup> ROSE STANLEY,  
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We present the Radar Echo Telescope for Cosmic Rays (RET-CR). Radar detection of in-ice particle cascades is of great interest for its application to explore the as yet undetected  $>10$  PeV cosmic-neutrino flux. The RET-CR detector aims to show the in-situ proof-of-principle of the method by detecting the in-ice continuation of a cosmic-ray-induced particle cascade impinging on a high-elevation ice sheet. We present the foreseen RET-CR detector layout and sensitivity obtained from the RET-CR simulation framework. This framework combines a full Monte-Carlo simulation of the in-air propagation of the cosmic-ray-induced particle cascade, its detection by the surface set-up, its continuation into the ice, and its detection by the radar set-up.

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