Abstract Submitted
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EUSO angular resolution based on Pierre Auger Observatory reconstruction methodology[1] WILLIAM PAINTER, Colorado Sch of Mines — Ultra high energy cosmic rays (UHECRs) are astro-particles with energies above 10^{18} eV and are a readily detected phenomena. Their origin is yet undetermined due to the exceedingly low flux, 1 particle per km^2 per century at 10^{20} eV. The proposed Extreme Universe Space Observatory (EUSO) utilizes the bottom 20 km of the atmosphere as a detection volume resulting in a detection area of nearly $150,000$ km^2 in nadir mode. We have developed an UHECR angular reconstruction algorithm based on the methodology developed at the Pierre Auger Observatory. This algorithm shows improved angular resolution over previous EUSO methods and has been applied to simulated showers over the expected energy and zenith angle ranges.

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