Expected performance of the K-EUSO space-based observatory

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In this contribution we show the performance of the planned K-EUSO mission for the detection of ultra-high energy cosmic rays

K-EUSO will be the first mission capable of detecting ultra high cosmic rays from space through the fluorescence technique

We make use of a detailed Monte Carlo to simulate extensive air showers, the photon transport, the detector and we reconstruct the triggered events

We give an estimate of:

- Exposure
- Expected trigger rates
- Angular reconstruction performance
- Energy reconstruction performance

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