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## JEM-EUSO observational capabilities for different UHE primaries.

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Cosmic rays with energies exceeding  $10^{18}$  eV, usually defined as Ultra High Energy Cosmic Rays (UHECRs), allow the possibility to study physics at energies well beyond man made accelerators. State of the art UHECR detectors have reached unprecedented exposures and have pioneered the field of Extreme Energy Cosmic Rays (EECR), cosmic rays with energies exceeding  $5 \times 10^{19}$  eV. The EECR flux is extremely small, of the order of 1 particle per square kilometer per century. The next generation of UHECR and EECR detectors are therefore expected to increase the exposure by at least one order of magnitude. The JEM-EUSO mission, currently designed to be hosted onboard the JEM module of the ISS, consists of a ultra wide field of view UV-telescope orbiting the earth at an altitude of about 400 km. JEM-EUSO will look for fluorescent UV track produced by Extensive Air Showers (EAS) on the night side of the earth. According to the most recent studies, the JEM-EUSO mission, can be accommodated on the ISS by using the SpaceX's Dragon spacecraft. In this work we present preliminary studies on the triggering and angular reconstruction performances for different types of primaries (protons, iron nuclei and gamma rays). We show how the use of the Dragon configuration indeed improves the performance of the mission.

### Collaboration

JEM-EUSO

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