Abstract Submitted for the APR13 Meeting of The American Physical Society

The JEM-EUSO Mission LAWRENCE WIENCKE, Colorado School of Mines, JEM-EUSO COLLABORATION — The Extreme Universe Space Observatory (EUSO) for full-sky high energy astroparticle physics above $3x10^{19}$ eV is planned for the Japanese Experiment Module (JEM) on the International Space Station. This extreme energy cosmic ray detector will look down on the earth's atmosphere from space to achieve an aperture at 10^{20} eV that exceeds the largest ground based detector by more than an order of magnitude. This pioneering instrument will also be sensitive to atmospheric optical transients, for example meteorites and "Elves." The planned scientific program, the instrument, including a Global Light System for ground based calibration and the R&D effort will be presented. The latter includes a prototype to be tested on the ground at the Telescope Array Project in 2013 and at stratospheric altitudes in a balloon launch planned for 2014 from Timmins Canada.

Lawrence Wiencke Colorado School of Mines

Date submitted: 11 Jan 2013 Electronic form version 1.4