### 30th International Cosmic Ray Conference



Contribution ID: 823 Type: Poster

# Advancement of the wide-angle JEM-EUSO optical system with holographic and Fresnel lenses

Friday, 6 July 2007 14:45 (0:00)

#### **Abstract content**

Extreme Universe Space Observatory on JEM/EF (JEM-EUSO) is a space mission to observe extremely high-energy cosmic rays. JEM-EUSO is a wide-angle refractive telescope in near-ultraviolet wavelength region to observe time- resolved atmospheric fluorescence images of the extensive air showers from the International Space Station. This paper will discuss the optical system of JEM-EUSO. We will report on an optimized optics design that maximizes the sensitivity of JEM-EUSO. We will describe this design and report on the results of optics manufacturing tests.

## If this papers is presented for a collaboration, please specify the collaboration

the JEM-EUSO Collaboration

#### Summary

## Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 5 (HE part 2), pages 1033-1036

Primary author(s): ADAMS, JR, James H. (NASA Marshall Space Flight Center, USA)

Co-author(s): TAKIZAWA, Yoshiyuki (RIKEN, Japan); BLACKWELL, L. J (The University of Alabama in Huntsville, USA); GEARY, Joseph M. (The University of Alabama in Huntsville, USA); LEHNER, David L. (NASA Marshall Space Flight Center, USA); LINDQUIST, Robert G. (The University of Alabama in Huntsville, USA); OHMORI, Hitoshi (RIKEN, Japan); PITALO, Stephen Kenneth (The University of Alabama in Huntsville, USA); TAKAHASHI, Yoshiyuki (RIKEN and The University of Alabama in Huntsville); Dr. ZUCCARO, Alessandro (National Institute for Applied Optics (INOA), Florence, Italy); KAWASAKI, Yoshiya (RIKEN, Japan); SAKAKI, Naoto (Aoyama Gakuin University, Japan)

Presenter(s): TAKIZAWA, Yoshiyuki (RIKEN, Japan)

**Session Classification :** Posters 2 + Coffee

Track Classification: HE.1.5