

EUROPEAN SPACE AGENCY

ASTRONOMY WORKING GROUP

Recommendation on the EUSO phase A study results

At its 118th meeting held on 13-14 May 2004 at ESA Headquarters, Paris, the Astronomy Working Group (AWG) was presented with the results of the phase A study of the EUSO project carried out under the joint responsibility of the Science and Manned Space Flight Programmes.

The AWG recognizes the importance of the science goals of EUSO. The possible evidence from ground based experiments of the violation of the Greisen-Zatsepic-Kuzmin (GZK) cut-off in the propagation of cosmic-rays is intriguing and provides a potential sign of new physics. Likewise, identifying the nature and direction of the highest energy particles that reach the Earth could give new insights into the astrophysical acceleration processes. Nevertheless, the AWG is concerned about the likely impact of ongoing and forthcoming ground based experiments on the field, in particular regarding the reality of the violation of the GZK limit, which may render the EUSO implementation premature.

The AWG acknowledges the significant effort and progress made by the EUSO collaboration on these issues. However, the AWG is not in a position to include EUSO among its top priorities, also given the present status of the level of resources of the Science Programme and the uncertain programmatic context of the International Space Station. *The AWG therefore cannot recommend moving the project into Phase B at the present time.*