

Gamma-ray detector on board lunar mission CE-1

T. Ma(1), J. Chang(1), N. Zhang(1), M. S. Cai(1), Y. Z. Gong(1), H. S. Tang(1), R. J. Zhang(1), N. S. Wang(1), M. Yu(1), J. P. Mao(1), S. B. Su(1), Z. Fang(1), Y. L. Zhou(2)

(1)Purple Mountain Observatory, Nanjing 210008, P. R. China, (2) National Astronomical Observatory, Beijing 100012, P. R. China (matao@pmo.ac.cn / Fax: 0086-25-83332179)

Gamma-ray spectrometer (GRS) is included in the payload complement of Chinese first lunar mission CE-1 that will be launched in 2007. Specific objectives of the GRS are to map abundances of O, Si, Fe, Ti, U, Th, K, and perhaps, Mg, Al, and Ca, to depths of about 20 cm. The design of GRS is described and its performance in the laboratory is presented.