

## **Recent Improvement of PHITS for Space Application**

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Particle and Heavy Ion Transport Code System PHITS has been widely used for various applications such as shielding calculation of high energy accelerator facilities and dose estimation in radiation therapies. Recently, PHITS has been improved to be capable of calculating dose and track-length distributions in terms of LET. This function enables us to estimate the dose equivalents of astronauts and the responses of detectors used in space. The results of the estimations will be given in the presentation, together with our former results of PHITS applying to the space exploration.