

## **Space protection for the mission to the Moon and Mars**

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After decades of research on low-Earth orbit, national space agencies and private entrepreneurs are investing on exploration of the Solar system. The main health risk for human space exploration is late toxicity caused by exposure to cosmic rays. On Earth, exposure of radiation worker is regulated by dose limits and mitigated by shielding and reducing exposure times. For space travel, different international space agencies adopt different limits, recently modified as reviewed in this paper. Shielding and reduced transit time are currently the only practical solution to maintain acceptable risks in deep space missions. We will present the most recent updates in these research fields to enable safe exploration of the Solar System.