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High Energy Physics Astroparticle Experiments to Improve the Radiation Health Risk Assessment in Space Missions

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In the near future all the space agencies are working to restart the human exploration of the space outside the Low Earth Orbit (LEO). Manned space missions in this and the next decade will see the presence of humans on the Moon and Mars surface. One of the main showstopper to be investigated for a safe exploration and colonization is the ionizing radiation biological effects that can compromise the health of astronauts/space-workers.

In this important task a principal roles could and do be done by the astroparticle experiments presently operating in space. Such experiments are a source of information crucial to improve the knowledge of radiobiology effects in space. In this talk a review of the past and present astroparticle experiments will be presented and will be highlighted some of the possible contributions and improvements in the space radiobiology research field.

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Collaboration / Activity

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