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Deep space mission REMEC for GCR monitoring

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The Radiation Environment Monitor for Energetic Cosmic rays (REMEC) is one of the missions selected by ESA in the frame of Czech ambitious missions programme to conduct phase 0, A, B studies of missions built and operated by Czech companies and research organizations. REMEC is a microsatellite proposed to be placed outside of Earth's magnetosphere in Sun-Earth L2 point where it will precisely measure and monitor the flux, composition and direction of cosmic radiation with energies from 10 MeV/n to 10 GeV/n. The main scientific payload is the novel magnetic spectrometer Pix.PAN based on Timepix4 technology, complemented by HardPix Timepix3-based radiation monitor. REMEC will study properties of galactic cosmic rays, provide new input to improve current SEP physics models and monitor penetrating particles presenting a serious hazard for long term human space travel and lunar habitation.

Eligibility for "Best presentation for young researcher" prize

No

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