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<https://us02web.zoom.us/j/89171810395>

Title: Upper limits on the total cosmic-ray luminosity of individual sources from gamma-rays

The upper limit on the integral flux of GeV–TeV gamma-rays is used to extract the upper limit on the total UHECR luminosity of individual sources. The correlation between upper limit on the integral GeV–TeV gamma-ray flux and upper limit on the UHECR luminosity is established through the cascading process that takes place during propagation of the cosmic rays in the background radiation fields. The measured upper limit on the GeV–TeV gamma-ray flux is restrictive enough to allow the calculation of an upper limit on the total UHECR cosmic-ray luminosity of five sources. The upper limit on the UHECR cosmic-ray luminosity of these sources is shown for several assumptions on the emission mechanism. The construction of the CTA Observatory will increase the number of observed sources and enhance the sensitivity of the measurements significantly in the next years. The combination of these multi-messenger information to come is certainly going to shed light on the puzzle of UHECR generation.

A palestrante:

<https://revistagalileu.globo.com/Ciencia/Espaco/noticia/2020/09/rita-de-cassia-dos-anjos-brasileira-premiada-busca-origem-de-raios-cosmicos.html>