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Opacities to very high energy gamma rays in the blazar jets

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Some of the brightest, in electromagnetic radiation, objects in the universe are surprisingly not only stars but galaxies. Active galaxies, at their core, have supermassive black holes which accelerate charged particles along an axis. The acceleration of these particles results in various emission processes. The emission is propagated in jets whose cones lie along this axis and is observable across the entire electromagnetic spectrum at relatively high intensities. We present here the attenuation, through photon-photon pair production, of the high energy radiation (gamma-rays) of quasars as it propagates through its own low-energy ambient radiation gas (the so-called broad-line region), the cosmic x-ray background and the cosmic microwave background.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

MSc

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