## XXV DAE-BRNS High Energy Physics Symposium 2022



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Type: Talk

## Constraints on light vector gauge boson from GRB observation

Thursday 15 December 2022 15:00 (15 minutes)

The energy deposition due to the pair annihilation of neutrinos into electrons can energize events such as gamma ray bursts (GRBs). This energy deposition can also be enhanced in different spacetime backgrounds. In this talk I will discuss whether an inclusion of Z' mediated neutrino annihilation process can alter the energy deposition. Comparing with the GRB observation data, we obtain bounds on gauge coupling for different backgrounds.

## Session

Astroparticle Physics and Cosmology

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