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## **Presenting backscattering dominated model for the prompt phase of GRBs to explain their key observational features**

*Wednesday, 7 July 2021 09:00 (15 minutes)*

We propose a Backscattering dominated prompt emission model for gamma ray bursts' (GRB) prompt phase in which the photons generated through pair annihilation at the centre of a GRB are backscattered through Compton scattering by an outflowing stellar cork. Using pair annihilation spectrum for seed photons, we show that the obtained spectra are capable of explaining the low energy and the high energy slopes in the observed prompt spectra of most GRBs. We also explain several observed features of GRB prompt phase such as Amati correlation, spectral lag etc.

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