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Turbulence Acceleration Model for the Broad Band Blazar Spectra

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The curved spectra seen in blazar emission can be explained by the curved electron spectra predicted by the stochastic acceleration process via turbulence. In this slow acceleration process, the time-dependent treatment is essential. In this talk I present our results of the time-dependent simulations of the acceleration and emission in blazars. The model naturally explains the hard and curved spectra. Our results prefer the hard sphere scattering to reconcile the spectral feature. Also taking into account the obtained low magnetic field, the particle scattering is likely due to the compressible waves.

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