

Conjectured Breaking of the Superluminal Quantum Correlations By Turbulent Fluctuations of the Zero Point Vacuum Field

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If the observed superluminal quantum correlations are disturbed by turbulent fluctuations of the zero point vacuum energy field, with the turbulent energy spectrum assumed to obey the universal Kolmogoroff law, a length is derived above which the correlations are conjectured to break. A directional dependence of this length would establish a preferred reference system at rest with the zero point energy. Assuming that the degree of turbulence is given by the small anisotropy of the cosmic microwave background radiation, a length of ~60 km is derived above which the correlations would break.

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