

Entanglement creation outside light cone

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We study the entanglement dynamics of two uniformly accelerated Unruh-DeWitt detectors moving back-to-back in vacuum. In our setup each UD detector never enters the other's light cone and there is no direct interaction between them. Suppose the two detectors are separable initially, and they couple to a common quantum field after the initial moment. We check whether quantum entanglement between the detectors can be created outside the light cone by environment.