

# Theory: A quantum-spacetime model with kinematical IR/UV mixing and its phenomenology

*Tuesday, September 5, 2023 3:15 PM (15 minutes)*

I present a doubly special relativistic model inspired from the  $k$ -lightlike non-commutative spacetime framework. A kinematical IR/UV mixing mechanism emerges naturally from the deformed energy-momentum dispersion relation, when considering particles with very small speeds. Thus, this model is suited for studying Planck-scale corrections to atom interferometry experiments.

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