

# Kappa-Minkowski spacetime, kappa-Poincaré Hopf algebra and realizations

Talk

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(joint work with Stjepan Meljanac)

We consider a family of algebras unifying  $\kappa$ -Minkowski spacetime and Poincaré algebra. Hopf algebra of Poincaré algebra is presented in unified and covariant form. Realizations and star product are analyzed in general. Left-right dual realizations and dual algebra are introduced and considered. Hermitian realization and corresponding star product are presented. The correspondence between the involution and inner product is analyzed. Integral identities are presented. Finally, translation invariance of star product is pointed out.

MSC2010: 17, 81.

Keywords:  $\kappa$ -Minkowski spacetime,  $\kappa$ -Poincaré Hopf algebra.

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