

# Natural Discretization in Noncommutative Field Theory

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## ABSTRACT

A discretization scheme provided by noncommutative field theory is further developed. Complete solutions for generic waves with and without rotational symmetry are presented and interpreted, together with their commutative limit. Nonlocality is precisely related to the angular momentum of the field configuration. Implementing the procedure for fermions avoids the (in)famous doubling problem of usual lattice field theories.