

Deformation Quantization of Kahler Manifolds and Their Twisted Fock Representation

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ABSTRACT

After a slight review of noncommutative Kahler manifolds given by using deformation quantization with separation of variables, explicit expressions of the twisted Fock representations of them are given. The twisted Fock representation is representation of the Heisenberg like algebra of which base state is constructed by acting creation operators on a vacuum state. "Twisted" means that the creation operators are not given by hermitian conjugates of the annihilation operators. Gauge theories on them are also discussed.