

Waldmann, Stefan**Deformation of Hermitian vector bundles and non-commutative field theory.** (English)[Zbl 1012.81029](#)

Maeda, Yoshiaki (ed.) et al., Noncommutative geometry and string theory. Proceedings of the international workshop, Keio Univ., Yokohama, Japan, March 16-22, 2001. Kyoto: Progress of Theoretical Physics, Prog. Theor. Phys., Suppl. 144, 167-175 (2001).

Summary: The author relates some recent results on the $*$ -representation theory of star product algebras to the deformation quantization of Hermitian vector bundles (joint work with H. Bursztyn). Moreover, the physical interpretation of deformed vector bundles as the basic objects in noncommutative field theories is given.

For the entire collection see [[Zbl 0989.00062](#)].

MSC:

- 81S10** Geometry and quantization, symplectic methods
- 53D55** Deformation quantization, star products
- 81T75** Noncommutative geometry methods in quantum field theory

Keywords:

$*$ -representation theory; star product algebras; deformation quantization; Hermitian vector bundles