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On Fedosov's approach to deformation quantization with separation of variables. (English)

[Zbl 0988.53042](#)

Dito, Giuseppe (ed.) et al., Conférence Moshé Flato 1999: Quantization, deformations, and symmetries, Dijon, France, September 5-8, 1999. Volume II. Dordrecht: Kluwer Academic Publishers. Math. Phys. Stud. 22, 167-176 (2000).

Summary: The description of all deformation quantizations with separation of variables on a Kähler manifold from [the author, Commun. Math. Phys. 180, No. 3, 745-755 (1996; [Zbl 0866.58037](#))] is used to identify the Fedosov star-product of Wick type constructed by *M. Bordemann* and *S. Waldmann* in [Lett. Math. Phys. 41, No. 3, 243-253 (1997; [Zbl 0892.53028](#))]. This star product is shown to be the one with separation of variables which corresponds to the trivial deformation of the Kähler form in the sense of the author's paper [loc. cit.]. To this end a formal Fock bundle on a Kähler manifold is introduced and an associative multiplication on its sections is defined.

For the entire collection see [[Zbl 0949.00040](#)].

MSC:

[53D55](#) Deformation quantization, star products

[81S10](#) Geometry and quantization, symplectic methods

Cited in **9** Documents

Keywords:

deformation quantizations; Fedosov star-product; Fock bundle; Kähler manifold

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