

**Dubois-Violette, Michel**

**Lectures on graded differential algebras and noncommutative geometry.** (English)

[Zbl 1038.58004](#)

Maeda, Yoshiaki (ed.) et al., Noncommutative differential geometry and its applications to physics. Proceedings of the workshop, Shonan, Japan, May 31–June 4, 1999. Dordrecht: Kluwer Academic Publishers (ISBN 0-7923-6930-0/hbk). Math. Phys. Stud. 23, 245-306 (2001).

Summary: These notes contain a survey of some aspects of the theory of graded differential algebras and of noncommutative differential calculi as well as of some applications connected with physics. They also give a description of several new developments.

For the entire collection see [[Zbl 1024.00030](#)].

**MSC:**

- [58B34](#) Noncommutative geometry (à la Connes)
- [81R60](#) Noncommutative geometry in quantum theory
- [81T75](#) Noncommutative geometry methods in quantum field theory
- [81T20](#) Quantum field theory on curved space or space-time backgrounds
- [81T70](#) Quantization in field theory; cohomological methods
- [81-02](#) Research exposition (monographs, survey articles) pertaining to quantum theory

Cited in **2** Reviews  
Cited in **39** Documents

**Full Text:** [arXiv](#)