

**Filippov, V. T.**

**Trivial ideals of a free alternative algebra.** (English. Russian original) Zbl 0542.17010

*Algebra Logic* 22, 130-142 (1983); translation from *Algebra Logika* 22, No. 2, 182-197 (1983).

Let  $\Phi$  be an associative commutative ring with identity and containing  $1/6$ . In a free alternative  $\Phi$ -algebra  $A$  with  $k \geq 6$  free generators the author constructs a trivial ideal, which is contained in the associative center of  $A$ . The author also constructs a completely characteristic trivial ideal in the free alternative  $\Phi$ -algebra with  $k \geq 5$  free generators.

Reviewer: [B.Gleichgewicht](#)

**MSC:**

[17D05](#) Alternative rings

Cited in **2** Reviews  
Cited in **4** Documents

**Full Text:** [DOI](#) [EuDML](#)

**References:**

- [1] M. M. Humm and E. Kleinfeld, "On free alternative rings," *J. Combin. Theory*,2, 140–144 (1967). · [Zbl 0153.06001](#) · [doi:10.1016/S0021-9800\(67\)80095-4](#)
- [2] S. V. Pchelintsev, "On meatideals of alternative algebras," in: Fourth All-Union Symposium on the Theory of Rings, Algebras and Modules. Abstracts of Communications, Kishinev (1980), pp. 87–88.
- [3] I. P. Shestakov, "Absolute zero divisors and radicals of finitely generated alternative algebras," *Algebra Logika*,15, No. 5, 585–602 (1976). · [Zbl 0369.17011](#)
- [4] I. P. Shestakov, "Radicals and nilpotent elements of free alternative algebras," *Algebra Logika*,14, No. 3, 354–365 (1975). · [Zbl 0329.17005](#)
- [5] V. T. Filippov, "On free mal'tsev algebras and alternative algebras," *Algebra Logika*,21, No. 1, 84–107 (1982).
- [6] M. Slater, "Nucleus and center in alternative rings," *J. Algebra*,7, No. 3, 372–388 (1967). · [Zbl 0166.30402](#) · [doi:10.1016/0021-8693\(67\)90077-4](#)
- [7] *Denstrovkaya Tetrad'* [in Russian], 2nd ed., Novosibirsk (1976).
- [8] V. T. Filippov, "On Engelian Mal'tsev algebras," *Algebra Logika*,15, No. 1, 89–109 (1976). · [Zbl 0354.17010](#)
- [9] V. T. Filippov, "On nilpotent ideals in Mal'tsev algebras," *Algebra Logika*,18, No. 5, 599–613 (1979).
- [10] K. A. Zhevlakov, A. M. Slin'ko, I. P. Shestakov, and A. I. Shirshov, *Rings That Are Nearly Associative*, Academic Press, New York (1982). · [Zbl 0487.17001](#)
- [11] A. I. Mal'tsev, "Analytic loops," *Mat. Sb.*,36, No. 3, 569–576 (1955). · [Zbl 0065.00702](#)
- [12] V. T. Filippov, "On chains of manifolds generated by free Mal'tsev and alternative algebras," *Dokl. Akad. Nauk SSSR*,260, No. 5, 1082–1085 (1981).
- [13] A. Thedy, "Right alternative rings," *J. Algebra*,37, No. 1, 1–43 (1975). · [Zbl 0318.17011](#) · [doi:10.1016/0021-8693\(75\)90086-1](#)

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.