

Agazaryan, S. V.; Matveev, O. A.

On almost complex geodular manifolds. (Russian) Zbl 0637.53052

Webs and quasigroups, Interuniv. thematic Collect. sci. Works, Kalinin 1987, 4-9 (1987).

[For the entire collection see [Zbl 0611.00007](#).]

The subject of this paper is devoted to further investigation of relations between the objects of nonassociative algebra and differential geometry. For a detailed interpretation of these ideas and some main results see the fundamental work of *L. V. Sabinin* [Methods of nonassociative algebra in differential geometry. Addition to *S. Kobayashi* and *K. Nomizu*, Foundation of differential geometry V. I (Russian) (Nauka, Moskva 1981; [Zbl 0526.53001](#))].

In this paper smooth local left geodular manifolds over the field of complex numbers are considered. A generalization of these objects is introduced, being called almost complex geodular manifold. A one-one correspondence between almost complex geodular manifolds and almost complex manifolds with almost complex linear connection is established.

Reviewer: [M.Malakhaltsev](#)

MSC:

- [53C15](#) General geometric structures on manifolds (almost complex, almost product structures, etc.) Cited in 1 Document
- [17D99](#) Other nonassociative rings and algebras

Keywords:

[geodular manifolds](#); [almost complex geodular manifold](#); [almost complex linear connection](#)