

AN INJECTIVE PSEUDO-BCI ALGEBRA IS TRIVIAL

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Abstract

Injective pseudo-BCI algebras are studied. There is shown that the only injective pseudo-BCI algebra is the trivial one.

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REFERENCES

- [1] D. Buşneag, *Categories of algebraic logic*, Editura Academiei Romane, Bucharest, 2006.
- [2] W.A. Dudek and Y.B. Jun, *Pseudo-BCI algebras*, East Asian Math. J. **24** (2008) 187–190.
- [3] G. Dymek, *p-semisimple pseudo-BCI-algebras*, J. Mult.-Valued Logic Soft Comput. **19** (2012) 461–474.
- [4] G. Dymek, *Atoms and ideals of pseudo-BCI-algebras*, Comment. Math. **52** (2012) 73–90.
- [5] G. Dymek, *On the category of pseudo-BCI-algebras*, Demonstratio Math. **46** (2013) 631–644.
- [6] G. Dymek, *On compatible deductive systems of pseudo-BCI-algebras*, J. Mult.-Valued Logic Soft Comput. **22** (2014) 167–187.
- [7] S. Eilenberg and J.C. Moore, *Foundations of relative homological algebra*, Mem. Amer. Math. Soc., Vol. 55, 1965.

- [8] G. Georgescu and A. Iorgulescu, *Pseudo-MV algebras: a noncommutative extension of MV-algebras*, The Proceedings The Fourth International Symposium on Economic Informatics, INFOREC Printing House, Bucharest, Romania, May (1999), 961–968.
- [9] G. Georgescu and A. Iorgulescu, *Pseudo-BL algebras: a noncommutative extension of BL-algebras*, Abstracts of The Fifth International Conference FSTA 2000, Slovakia, February 2000, 90–92.
- [10] G. Georgescu and A. Iorgulescu, *Pseudo-BCK algebras: an extension of BCK-algebras*, Proceedings of DMTCS'01: Combinatorics, Computability and Logic, Springer, London, 2001, 97–114.
- [11] Y. Imai and K. Iséki, *On axiom systems of propositional calculi XIV*, Proc. Japan Academy **42** (1966) 19–22.
doi:10.3792/pja/1195522169
- [12] K. Iséki, *An algebra related with a propositional calculus*, Proc. Japan Acad. **42** (1966) 26–29.
doi:10.3792/pja/1195522171

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