

On identities of isotopy closure of variety of groups

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In this talk we will discuss the following result.

Theorem. *A quasigroup $G(\cdot)$ is an isotope of group if and only if one of the following identities holds for $G(\cdot)$.*

- (a) $x\{z\backslash[(z/u)v]\} = \{[x(z\backslash z)]/u\}v$
- (b) $x\{u\backslash[(z/u)v]\} = \{[x(u\backslash z)]/u\}v$
- (c) $x\{z\backslash[(u/u)v]\} = \{[x(z\backslash u)]/u\}v$
- (d) $x[y\backslash\{(yy)/z\}u] = \{[x[y\backslash(yy)]]/z\}u$
- (e) $x[y\backslash\{(yz)/y\}u] = \{[x[y\backslash(yz)]]/y\}u$
- (f) $x[z\backslash\{(yy)/y\}u] = \{[x[z\backslash(yy)]]/y\}u$

References

- [1] Movsisyan Yu. M., *Introduction to the Theory of Algebras with Hyperidentities*, Yerevan State University Press, Yerevan, 1986.