Yuri Movsisyan*, Alex Manoogian 1, 0025 Yerevan, Armenia, and Marlen Yolchyan. A Cayley-type theorem for g-dimonoids.

An algebra $(D; \dashv, \vdash)$ with two associative binary operations is called a g-dimonoid [1], if it satisfies the following identities:

$$(x\dashv y)\dashv z=x\dashv (y\vdash z),$$

$$(x \dashv y) \vdash z = x \vdash (y \vdash z).$$

The g-dimonoid $(D; \dashv, \vdash)$ is called a dimonoid [2], if it satisfies the following additional identity

$$(x \vdash y) \dashv z = x \vdash (y \dashv z).$$

In this talk we present a Cayley-type theorem for g-dimonoids.

References

- [1] Yu. M. Movsisyan, S. Davidov, M. Safaryan, Construction of free g-dimonoids. Algebra Discrete Math., 18:1 (2014), 138-148.
- [2] J. L. Loday, *Dialgebras. Dialgebras and Related Operads*. Lect. Notes Math., Springer, Berlin (2001), pp. 7-66. (Received October 28, 2018)