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On Malcev algebras with the identity $J(x_1x_2\dots x_n, y, z) = 0$.

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Let \mathfrak{MA}_n be a variety of Malcev algebras with the identity $J(x_1x_2\dots x_n, y, z) = 0$, $n \in \mathbb{N}$. We study a structure of Malcev algebras from this variety. In particular, a Malcev algebra $A \in \mathfrak{MA}_2$ is a tangent algebra of some smooth left automorphic Moufang loop M . Let us call a variety of smooth Moufang loops with the identity $([...[x_1, x_2], x_3] \dots, x_k), y, z) = 1$ the variety of k -generalized left automorphic Moufang loops.

We study the correspondence between smooth k -generalized left automorphic Moufang loops and the variety \mathfrak{MA}_k of their tangent algebras. We show that a local smooth k -generalized left automorphic Moufang loop defines a global smooth k -generalized left automorphic Moufang loop. This talk is based on the joint research with M. Rasskazova and R. Carrillo Catalan.