

**SUR LA STRUCTURE DU GROUPE
D'AUTOMORPHISMES DE CERTAINES SURFACES
AFFINES**

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Abstract

We describe the structure of the group of algebraic automorphisms of the following surfaces 1) $\mathbb{P}_k^1 \times \mathbb{P}_k^1$ minus a diagonal; 2) $\mathbb{P}_k^1 \times \mathbb{P}_k^1$ minus a fiber. The motivation is to get a new proof of two theorems proven respectively by L. Makar-Limanov and H. Nagao. We also discuss the structure of the semi-group of polynomial proper maps from \mathbb{C}^2 to \mathbb{C}^2 .

2000 *Mathematics Subject Classification.* 14E07.

Key words. Algebraic automorphisms, amalgamated products, polynomial proper maps.