

Homeomorphism groups of the Airplane and the Basilica Julia sets

mardi 30 avril 2024 14:00 (1 heure)

The airplane and the Basilica Julia sets are two compact fractal sets that appear in different parts of group theory. In this talk, we will be interested in their full homeomorphism groups. We will show that these groups can be identified with a specific universal Burger-Mozes group (this was proved by Y. Neretin for the Basilica) and a specific kaleidoscopic group for the Airplane. Kaleidoscopic groups are analogues of Burger-Mozes universal groups where trees are replaced by dendrites.

These identifications will be explained and we will exploit them to prove topological and dynamical properties of these topological groups.

This is a joint work in progress with Matteo Tarocchi.

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