

JEAN-PAUL ALLOUCHE, CNRS, LRI, Bat. 490, F-91405 Orsay Cedex, France

*Drawings on the sand in the Vanuatu islands, Indian Kolam, Sierpinski curves and morphisms*

People from the Vanuatu islands draw on the sand pictures that have both a ritual and an artistic meaning. These drawings are Eulerian paths on particular graphs (this was explained to us by M. Chemillier: Conférence-Concert at the Musée des Arts d'Afrique et d'Océanie, Paris, Marc Chemillier, Tom Johnson and Daniel Kienzy). The interested reader can read the books of Paulus Gerdes: *Une tradition géométrique en Afrique, les dessins sur le sable*, Tomes 1, 2 et 3, L'Harmattan.

We show how these drawings are related to Indian pictures called *kolam(s)*, and to a way of representing plane-filling curves (Peano, Hilbert), but also to morphisms of free monoids and finite automata.

We will finally allude to a quickly expanding new field known as *ethnomathematics*.